



National Commission
on COVID-19 and
Criminal Justice

COVID-19 in U.S. State and Federal Prisons

PREPARED FOR THE COMMISSION BY

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Key Findings

- + **On average, the COVID-19 mortality rate within prisons is 61.8 deaths per 100,000 people in prison, twice as large as the general public mortality rate** after adjusting for the sex, age and race/ethnicity of those incarcerated. This disparity is 60% higher than a comparison using an unadjusted population mortality rate.
- + **The rate of COVID-19 cases reported by state and federal prisons in the U.S. is nearly 7,000 cases per 100,000 people in prison, more than four times the rate of confirmed cases per 100,000 U.S. residents.** An adjustment for the sex, age and race/ethnicity of people in prison was not possible due to the lack of confirmed COVID-19 case data by demographic characteristics.
- + **Average case and mortality rates within prisons conceal a great deal of heterogeneity across states.** Several states appear to be doing quite well, with 14 states reporting zero COVID-19 deaths within prisons and another six states with COVID-19 mortality rates below what would be expected given the state mortality rates for specific sex, age, and race/ethnicity groups. Several other states, by contrast, exhibit mortality rates within prisons that are considerably higher than the adjusted state mortality rates. Future investigation into these differences may yield important insights for policymakers.
- + **The types of prisons with the highest number of COVID-19 cases are those operated by state governments, prisons in the southern region of the U.S., and prisons that are large in terms of population (over 1,000 inmates).** The highest COVID-19 mortality rates are observed within large prisons and those within the Midwest region of the U.S.
- + Documenting the contribution of prisons to the spread of COVID-19 infections in surrounding communities was not possible due to data limitations, including a lack of geographic specificity in reported COVID-19 data as well as uncertainty about how prison cases and deaths are recorded in county totals.

Overview

Novel coronavirus disease 2019 (COVID-19) outbreaks have occurred at hundreds of jails and prisons across the United States, with new cases increasing rapidly in July and August 2020. Incarceration facilities represented 19 of the top 20 clusters of confirmed cases in the U.S. as of August 19 (Smith et al. 2020). These trends are especially concerning considering that the U.S. has the largest incarcerated population in the world, with approximately 2 million people behind bars. More than 1.3 million individuals are in state or federal prisons and the remainder are in county jails (Doleac, Harvey and Kaplan 2020).

Using data from a variety of sources, this report contributes to our understanding of COVID-19 outbreaks within state and federal prisons by addressing two main questions:

- + How do overall COVID-19 case and mortality rates within state and federal prisons compare with rates for the general population, both before and after adjusting for the age, race/ethnicity, and sex of people in prison?
- + How do COVID-19 infections vary by the type and location of a prison?

The following figures and tables present descriptive evidence that helps answer these questions. While the spread of COVID-19 within state and federal prisons is likely influenced by policy responses at the institutional, local, state, and national level, documenting or evaluating such policies is beyond the scope of this report.

COVID-19 Case and Mortality Rates in State and Federal Correctional Systems

Highly infectious diseases pose a significant challenge for carceral institutions. Such facilities continue to represent the largest clusters of positive COVID-19 cases (Smith et al 2020).¹ This disproportionate impact of epidemics on people in prison is not a new phenomenon. Reports from San Quentin State Prison in California during the influenza pandemic of 1918, also known as the “Spanish flu,” estimated that half of the 1,900 people incarcerated there were infected during the outbreak’s first wave (Hawks, Woolhandler and McCormick 2020).

One of the most significant challenges posed by the current crisis is the inability of incarcerated people to maintain a safe social distance from each other in shared spaces that are smaller, on average, than cruise ship cabins or shared bedrooms in nursing homes (Kajstura and Landon 2020). Twelve state prison systems and the Federal Bureau of Prisons (BOP) held more inmates than their official capacity at the end of 2018, further hindering efforts to slow the spread of disease through social distancing (Carson 2020).² Incarcerated individuals are also more likely to suffer from chronic health conditions, such as heart disease or diabetes, which can exacerbate the impact of COVID-19 on this population (Maruschak, Berzofsky and Unangst 2015, Wildeman and Wan 2017, Hawks Hoolhandler and McCormick 2020). Other challenges include limited medical resources as well as a daily churn of staff members, visitors, and new arrivals via admissions (Wallace et al. 2020).

Finally, as a result of longer sentences over the past several decades, the average age of people in prison is increasing. More than 20% of those now serving sentences in state and federal prisons are over 50 years old (Carson 2020).

More than 115,000 COVID-19 cases and nearly 900 deaths had been reported among incarcerated individuals and correctional staff at state and federal prisons as of August 19, 2020 (The Marshall Project 2020). For every 100,000 people in prison, nearly 6,900 have tested positive and more than 60 have died—a rate four times the national figure for cases and 30% higher for deaths.³ While informative, this simple comparison ignores the fact that the incarcerated population differs greatly across demographic characteristics for which large disparities exist in COVID-19 case and mortality rates. For example, Black Americans are currently twice as likely to die from COVID-19 than white Americans (Hardy and Logan, 2020), and they are incarcerated five times more often than white Americans (Sabol, Johnson

¹ Recent research by the CDC has defined “focal outbreaks” as those that occur in long-term care facilities, food processing facilities, correctional facilities, or other workplaces. These focal outbreaks are among the most important factors contributing to county-level COVID-19 prevalence (Oster et al. 2020).

² These 12 systems were the Federal Bureau of Prisons and state prison systems in AZ, CO, DE, HI, ID, IA, NB, NM, OK, VA, WA, WI (Carson 2020).

³ These rates were calculated using cases reported by the Marshall Project as of August 19, 2020 (The Marshall Project 2020), total state and federal prison populations at the end of 2018 (Carson 2020), and the overall U.S. case and death rates on August 15, 2020 reported by the CDC (USA Facts 2020).

and Caccavale, 2020). Further, people in prison are much more likely to be male and younger than a non-incarcerated individual.

To compare COVID-19 mortality rates in prisons with rates for a non-incarcerated population, this report calculates expected mortality rates given each incarcerated person's state of residence, sex, age, and race/ethnicity. This exercise builds upon Saloner et al. (2020), researchers who found a COVID-19 mortality rate at the beginning of June 2020 that was three times higher in prisons than would have been expected in the same age and sex distributions of the U.S. population. That disparity is 50% greater than using the unadjusted national mortality rate.⁴

Figure 1 uses data that tracks COVID-19 deaths in prisons (The Marshall Project Project 2020), state-level mortality rates by sex, age, and race/ethnicity (Centers for Disease Control and Prevention 2020a, b), and the distribution of people in prison for each state by these characteristics (U.S. Bureau of Justice Statistics 2020). This data enables a state-by-state comparison of the COVID-19 mortality rate among individuals in prison (measured on the vertical axis) with the state COVID-19 mortality rate, adjusting for the demographic characteristics of those in prison (measured on the horizontal axis). The accuracy of these calculations depends on state and federal correctional agencies reporting correct information about their incarcerated populations, which cannot be independently verified. Mortality rates for BOP facilities are also calculated and compared with the U.S. national mortality rate adjusted by the sex, age, and race/ethnicity characteristics of people in BOP prisons. Five diagonal lines are included to assist comparison.

⁴ These comparisons are not yet possible for confirmed cases of COVID-19 since data by sex, age, and race/ethnicity is currently only available for deaths.

INTERPRETING THE DATA: FIGURE 1

The **solid red line** labeled “prison rate=state rate” represents equality between the prison mortality rate and the state rate adjusted for the prison demographic characteristics. All points to the left and above this line indicate that a state has a higher COVID-19 mortality rate within the prison system than would be expected given the mortality rates of all individuals in the state with similar sex, age, and race/ethnicity characteristics. The other four red (dashed) lines represent where the prison rate is two, three, four, and five times as high as the adjusted state rate.

Figure 1: COVID-19 mortality rates in state and federal prisons as of August 15, 2020, compared with state mortality rates adjusted to match the sex, age, and race/ethnicity of people in prison.

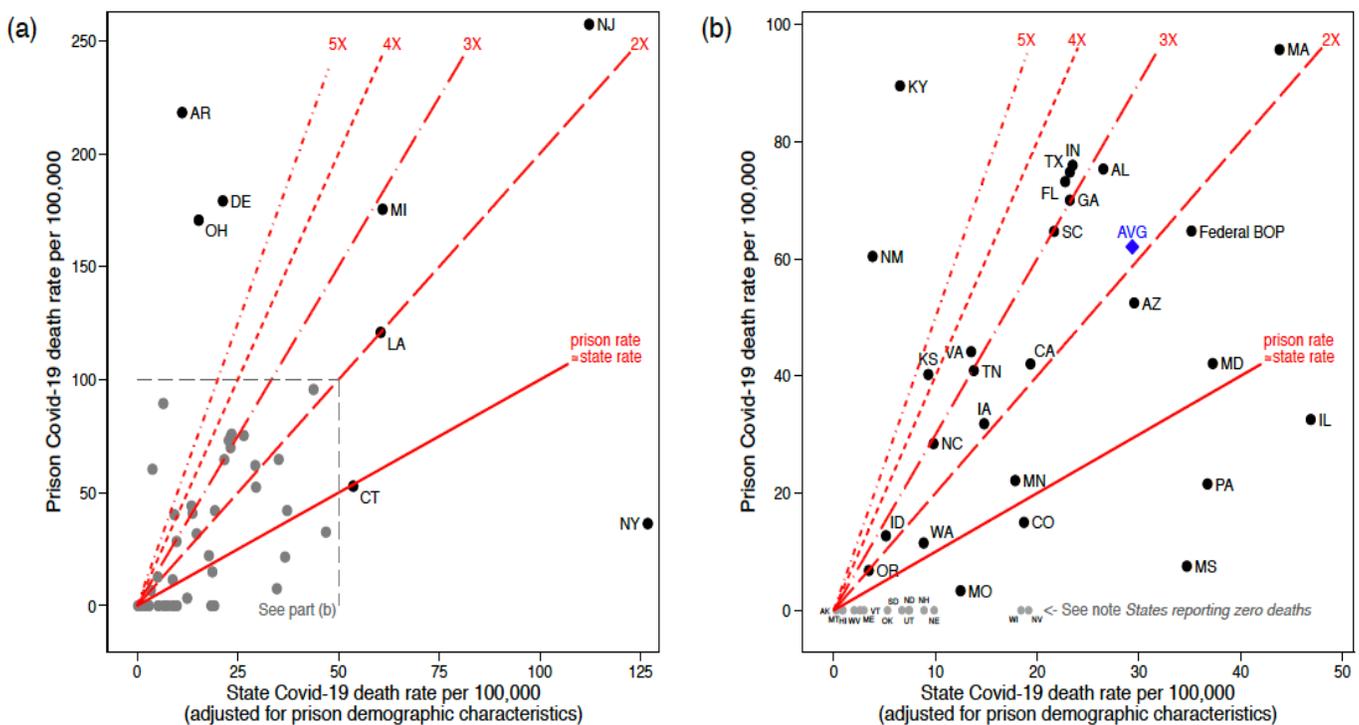


Figure Notes: Each scatter point in this figure represents a state, with the exception of one scatter point for federal prisons. Part (b) expands the area at the bottom left of part (a) so that all states can be easily viewed. The location of each scatter point is determined by the COVID-19 mortality rate within a state’s correctional facilities (vertical axis) and the COVID-19 mortality rate within the state adjusted for the sex, age, and race/ethnicity of the prison population (horizontal axis). Information capturing the deaths of incarcerated people in two states (RI and WY) is not available through The Marshall Project (2020) and is thus likely not being reported. These two states are not included in the figure, nor are they included in the calculation of the national averages. COVID-19 deaths among people in prison by state were obtained from The Marshall Project (2020) and reflect data as of August 15, 2020. State mortality rates specific to sex, age, and race were collected from Centers for Disease Control and Prevention (2020a) and Centers for Disease Control and Prevention (2020b) (also through August 15). The sex, age, and race/ethnicity distribution for people in state prisons was obtained from U.S. Bureau of Justice Statistics (2020) and Carson (2020). States reporting zero deaths: The following 14 states have zero reported COVID-19-related deaths among people in prison and are listed in order from smallest to largest based on their state-adjusted mortality rate: AK, MT, HI, WV, ME, VT, OK, SD, UT, ND, NH, NE, WI, NV.

Overall, 21 states reporting deaths exhibit prison mortality rates lower than the adjusted state rates. Fourteen of these states report zero deaths in state prisons.⁵ Notably, the mortality rate within New York state prisons is much lower than expected given the mortality for individuals with similar demographic characteristics in New York (part (a) of Figure 1). Approximately half the states exhibit mortality rates double what would be expected based on the demographic characteristics of prisoners. The weighted average across all systems is around twice the expected mortality as indicated by the blue diamond in Figure 1.⁶ Mortality in many states is considerably higher than expected. For example, COVID-19 deaths within Ohio prisons is 170 per 100,000 incarcerated people, 11 times higher than the expected mortality rate (around 15 per 100,000) given the incarcerated individual's sex, age, and race/ethnicity characteristics.

Table 1 lists each of the numbers depicted in Figure 1 along with information on the total number of COVID-19 deaths reported as of August 19, 2020, and the unadjusted COVID-19 mortality rates for each state. State prison systems are listed in descending order based on how much higher the prison COVID-19 mortality rate is compared with the state mortality rate adjusted for the sex, age, and race/ethnicity of the prison population. This table further illustrates the importance of adjusting for demographic characteristics when comparing mortality rates. For the U.S. as a whole, the prison mortality rate is 30% higher than the national mortality rate. However, adjusting for sex, age and race/ethnicity of the U.S. prison population, the prison COVID-19 mortality rate is 110% higher than the national mortality rate. Again, there is substantial heterogeneity with regard to the importance of this adjustment by state. In Arkansas, the state with the worst performance in its prison system relative to the overall state mortality rate, the COVID-19 mortality rate is 10.9 times higher than the unadjusted state mortality rate and 19.5 times higher than the state mortality rate adjusted for the demographic characteristics of people in prison in Arkansas. This demographic adjustment is less consequential for the comparison in a few states, such as Michigan, where each comparison suggests that the COVID-19 mortality rate in prisons is three times higher than state mortality rates.

⁵ The following 14 states have zero reported COVID-19 related deaths among prisoners: AK, HI, ME, MT, NE, NH, NV, ND, OK, SD, UT, VT, WV, WI.

⁶ This average figure suggests a disparity less than the rate reported in Saloner et al. (2020) which was three times higher adjusting for age and gender characteristics. This difference could be due to the importance of adjusting for race/ethnicity but is also influenced by the timing of the measurement. The comparison by Saloner et al. (2020) is made as of June 6, 2020 while the comparison in Figure 1 is based on data through August 15, 2020.

Table 1: COVID-19 mortality by state prisons and overall state populations

	State		Prison Covid-19 deaths	Prison population (12/31/2018)	Prison Covid-19 deaths per 100K prisoners	State Covid-19 deaths per 100K residents	Prison to state deaths ratio	State Covid-19 deaths per 100K residents adjusted	Prison to state deaths ratio adjusted
1	Arkansas	AR	34	15578	218.3	20.1	10.9	11.2	19.5
2	New Mexico	NM	4	6623	60.4	31.9	1.9	3.8	15.8
3	Kentucky	KY	11	12290	89.5	18.1	5	6.5	13.8
4	Ohio	OH	86	50399	170.6	27.7	6.2	15.3	11.2
5	Delaware	DE	10	5582	179.1	55.5	3.2	21.3	8.4
6	Kansas	KS	4	9938	40.2	14.6	2.8	9.3	4.3
7	Virginia	VA	13	29461	44.1	28.5	1.5	13.5	3.3
8	Indiana	IN	20	26333	76	44.3	1.7	23.5	3.2
9	Texas	TX	112	149777	74.8	32.8	2.3	23.2	3.2
10	Florida	FL	70	95693	73.2	39.5	1.9	22.8	3.2
11	Georgia	GA	34	48579	70	35.4	2	23.2	3
12	South Carolina	SC	12	18559	64.7	37.9	1.7	21.7	3
13	Tennessee	TN	8	19552	40.9	17.9	2.3	13.8	3
14	North Carolina	NC	10	35157	28.4	15.7	1.8	9.8	2.9
15	Michigan	MI	68	38761	175.4	58.8	3	61	2.9
16	Alabama	AL	16	21244	75.3	43.3	1.7	26.5	2.8
17	Idaho	ID	1	7869	12.7	14.5	0.9	5.1	2.5
18	New Jersey	NJ	49	19045	257.3	158	1.6	112.2	2.3
19	Massachusetts	MA	8	8360	95.7	114.6	0.8	43.8	2.2
20	California	CA	53	126042	42	26.9	1.6	19.3	2.2
21	Iowa	IA	3	9421	31.8	30.2	1.1	14.8	2.2
22	Louisiana	LA	18	14880	121	82.5	1.5	60.5	2
23	Oregon	OR	1	14707	6.8	8.3	0.8	3.4	2
24	Federal BOP	FE	116	179213	64.7	47.5	1.4	35.2	1.8
25	Arizona	AZ	22	41937	52.5	55.5	0.9	29.5	1.8
26	Washington	WA	2	17415	11.5	20.5	0.6	8.8	1.3
27	Minnesota	MN	2	9032	22.1	29.4	0.8	17.8	1.2
28	Maryland	MD	8	18999	42.1	64.5	0.7	37.3	1.1
29	Connecticut	CT	7	13228	52.9	118.6	0.4	53.7	1
30	Colorado	CO	3	19995	15	31.3	0.5	18.7	0.8
31	Illinois	IL	13	39915	32.6	55.5	0.6	46.9	0.7
32	Pennsylvania	PA	10	46372	21.6	60.1	0.4	36.7	0.6
33	New York	NY	17	46778	36.3	164.6	0.2	126.8	0.3
34	Missouri	MO	1	29970	3.3	21.5	0.2	12.5	0.3
35	Mississippi	MS	1	13278	7.5	62.2	0.1	34.7	0.2
36	Utah	UT	0	5202	0	10.4	0	7.4	0
37	Nevada	NV	0	13382	0	30.4	0	19.2	0
38	Montana	MT	0	3763	0	5.6	0	0.8	0
39	South Dakota	SD	0	3847	0	18.4	0	6.7	0
40	West Virginia	WV	0	5829	0	7.4	0	2	0
41	Oklahoma	OK	0	27245	0	15.9	0	5.3	0
42	Nebraska	NE	0	5194	0	17.5	0	9.9	0
43	Vermont	VT	0	1713	0	9.5	0	3	0
44	Wisconsin	WI	0	23576	0	16.9	0	18.4	0
45	Alaska	AK	0	4235	0	2.6	0	0.2	0
46	North Dakota	ND	0	1673	0	17.1	0	7.4	0
47	Maine	ME	0	2369	0	10.5	0	2.6	0
48	New Hampshire	NH	0	2561	0	29.8	0	8.9	0
49	Hawaii	HI	0	5010	0	1.8	0	0.9	0
-	Rhode Island	RI	-	2580	-	93.4	-	30.4	-
-	Wyoming	WY	-	2444	-	4.8	-	0.9	-
	US Total	US	847	1370605	61.8	47.5	1.3	29.3	2.1

Table Notes: This table presents COVID-19 mortality information for state prisons and federal prisons (Federal BOP) alongside COVID-19 mortality information for each state's overall population. The prison COVID-19 death data was obtained from The Marshall Project (2020) on August 19, 2020. The prison populations are as of December 31, 2018 available from Carson (2020). The state-level COVID-19 mortality was aggregated from county-level data provided by USA Facts (2020) as of August 15, 2020. Information capturing inmate deaths in two states (RI and WY) is not available through The Marshall Project (2020) and thus likely not reported by the state. State mortality rates specific to sex, age and race were collected from Centers for Disease Control and Prevention (2020a) and Centers for Disease Control and Prevention (2020b) (through August 15), and the sex, age and race/ethnicity distribution for state prisoners was obtained from U.S. Bureau of Justice Statistics (2020) and Carson (2020).

KEY FINDING

On average, the COVID-19 mortality rate within prisons is 61.8 deaths per 100,000 people in prisons, twice as large as the mortality rate after adjusting for the sex, age, and race/ethnicity of those incarcerated. The disparity is 60% higher than a comparison using an unadjusted population mortality rate.

Table 2 provides COVID-19 case counts and rates by state and calculates the ratio of cases per 100,000 people in prison to cases per 100,000 residents in the final column. An adjustment for the sex, age, and race/ethnicity of people in prison was not possible due to the unavailability of confirmed COVID-19 case data by individual demographic characteristics. Even without the ability to adjust for demographic characteristics, Table 2 demonstrates a striking disparity of cases in prisons compared with statewide totals. Over 10% of the people in state prison in Vermont, for example, tested positive for COVID-19, a rate nearly 50 times higher than the rate of confirmed cases for the state as a whole. While Vermont appears to be an outlier, the number of COVID-19 positive cases in prison is five or more times what would be expected based on confirmed cases for 17 states. On the other hand, prisons in 14 states have had fewer positive COVID-19 tests per capita than the corresponding state populations. While these comparisons clearly demonstrate heterogeneity across states, there are substantial differences in the COVID-19 testing policies and procedures both inside and outside prisons across states.

KEY FINDING

The rate of COVID-19 cases reported by state and federal prisons in the U.S. is nearly 7000 cases per 100,000 people in prison, more than four times the rate of confirmed cases per 100,000 U.S. residents. An adjustment for the sex, age and race/ethnicity of people in prison was not possible due to the lack of confirmed COVID-19 case data by demographic characteristics.

Table 2: COVID-19 cases by state prisons and overall state populations

	State		Prison Covid-19 reported cases	Prison population (12/31/2018)	Prison Covid-19 cases per 100K prisoners	State Covid-19 confirmed cases per 100K residents	Prison to state case ratio
1	Vermont	VT	201	1713	11733.8	241.8	48.5
2	Arkansas	AR	4665	15578	29946.1	1722.8	17.4
3	Ohio	OH	5401	50399	10716.5	921.1	11.6
4	Michigan	MI	4312	38761	11124.6	1017.3	10.9
5	Kansas	KS	1029	9938	10354.2	1170.3	8.8
6	Idaho	ID	1062	7869	13496	1537.5	8.8
7	Tennessee	TN	3267	19552	16709.3	1929	8.7
8	Kentucky	KY	851	12290	6924.3	871.3	7.9
9	Connecticut	CT	1446	13228	10931.4	1427.6	7.7
10	New Jersey	NJ	3023	19045	15872.9	2110.3	7.5
11	New Mexico	NM	505	6623	7624.9	1111.2	6.9
12	Texas	TX	18495	149777	12348.4	1851.7	6.7
13	Virginia	VA	2406	29461	8166.7	1238.9	6.6
14	Oregon	OR	524	14707	3562.9	545.7	6.5
15	Delaware	DE	529	5582	9476.9	1683.8	5.6
16	Florida	FL	12988	95693	13572.6	2652.2	5.1
17	Minnesota	MN	517	9032	5724.1	1142.1	5
18	Colorado	CO	862	19995	4311.1	917.5	4.7
19	West Virginia	WV	126	5829	2161.6	471	4.6
20	California	CA	8816	126042	6994.5	1568.1	4.5
21	Federal BOP	FE	11524	179213	6430.3	1604.7	4
22	North Carolina	NC	1504	35157	4278	1381.3	3.1
23	South Carolina	SC	1127	18559	6072.5	2056.5	3
24	Massachusetts	MA	390	8360	4665.1	1787.4	2.6
25	Iowa	IA	397	9421	4214	1636.7	2.6
26	Indiana	IN	800	26333	3038	1183.5	2.6
27	Washington	WA	377	17415	2164.8	878.3	2.5
28	Louisiana	LA	930	14880	6250	2941.3	2.1
29	Maryland	MD	664	18999	3494.9	1649	2.1
30	Missouri	MO	685	29970	2285.6	1081.8	2.1
31	Arizona	AZ	1572	41937	3748.5	2646.8	1.4
32	Georgia	GA	1485	48579	3056.9	2214.9	1.4
33	Mississippi	MS	399	13278	3005	2411	1.2
34	Wisconsin	WI	319	23576	1353.1	1117.3	1.2
35	Wyoming	WY	15	2444	613.7	557.6	1.1
36	Alaska	AK	26	4235	613.9	568.1	1.1
37	Illinois	IL	532	39915	1332.8	1613.9	0.8
38	New York	NY	755	46778	1614	2184.5	0.7
39	Montana	MT	13	3763	345.5	529.3	0.7
40	Oklahoma	OK	213	27245	781.8	1207.9	0.6
41	Pennsylvania	PA	277	46372	597.3	967	0.6
42	Utah	UT	46	5202	884.3	1446.1	0.6
43	North Dakota	ND	11	1673	657.5	1108	0.6
44	Maine	ME	4	2369	168.8	308.3	0.5
45	Hawaii	HI	9	5010	179.6	340.8	0.5
46	Alabama	AL	238	21244	1120.3	2194.1	0.5
47	Rhode Island	RI	20	2580	775.2	1818.5	0.4
48	Nebraska	NE	10	5194	192.5	1542	0.1
49	South Dakota	SD	5	3847	130	1143.7	0.1
50	Nevada	NV	25	13382	186.8	1967.7	0.1
51	New Hampshire	NH	1	2561	39	513.3	0.1
	US Total	US	95398	1370605	6960.3	1604.7	4.3

Table Notes: This table presents COVID-19 case information for state prisons and federal prisons (Federal BOP) alongside COVID-19 confirmed case information for each state's overall population. The prison COVID-19 case data was obtained from The Marshall Project (2020) on August 19, 2020. The prison populations are as of December 31, 2018 available from Carson (2020). The state-level COVID-19 confirmed cases were aggregated from county-level data provided by USA Facts (2020) as of August 15, 2020. An adjustment for the sex, age and race/ethnicity of prisoners was not possible due to the unavailability of confirmed COVID-19 case data by individual demographic characteristics.

COVID-19 CASE AND MORTALITY RATES BY FACILITY CHARACTERISTICS

Since early concerns emerged about testing and reporting in prisons (such as those with the Federal Bureau of Prisons discussed by Chwalisz (2020), most state and federal corrections agencies now regularly report case statistics at the facility level. At least two research teams (Kaplan et al. (2020) and UCLA Law (2020)) gather this information from various federal and state agency websites and make it publicly available.⁷

To compare COVID-19 cases and mortality across different types of prisons, facility-level counts from UCLA Law (2020) were linked to the 2012 Census of State and Federal Adult Correctional Facilities (CSFACF) (United States Bureau of Justice Statistics 2020). While facility information in the CSFACF is now almost eight years old, it represents the best available information with broad coverage of prisons across the U.S. Information available through the CSFACF includes the facility address, operator type, and total male and female populations in 2012. In total, 1,142 of 1,475 (77%) facilities in the UCLA Law (2020) data are linked to individual facilities in the CSFACF. Table 3 summarizes COVID-19 cases and deaths for the 1,142 facilities in the UCLA Law (2020) data that we were able to link to the 2012 CSFACF.

Table 3 indicates that, as of August 15, 2020, COVID-19 has likely entered the majority of prisons in the U.S. ⁸ Of the 1,137 linked facilities reporting COVID-19 case or death data, 68% have at least one positive COVID-19 case within their incarcerated population. Within the 945 facilities reporting COVID-19 case or death data for correctional staff, 74% have at least one positive case among staff. On average, a prison in the U.S. has seen nearly 90 COVID-19 cases between incarcerated individuals and staff.

KEY FINDING

The types of prisons with the highest number of COVID-19 cases are those operated by state governments, prisons in the southern region of the U.S., and prisons that are large in terms of population (over 1,000 inmates). The highest COVID-19 mortality rates are observed within large prisons and those within the Midwest region of the U.S.

⁷ Kaplan et al (2020) stopped collecting facility-level data on July 13, 2020, so this report focuses on data provided through UCLA Law (2020), which continues to be updated daily as of this report.

⁸ While we can claim that the majority of prisons are listed in the UCLA Law (2020) data, it is possible that many facilities are not reporting this information. Therefore, we cannot claim for certain that the majority of all prisons in the U.S. have at least one COVID-19 case.

Table 3: COVID-19 prevalence in state and federal prisons

	Total # of prisons reporting	Total % of prisons w/ outbreak	Avg. # of positive cases	Avg. # of positive cases per 100K prisoners	Avg. # of deaths	Avg. # of deaths per 100K prisoners
Prison inmates	1137	0.68	71.00	7769	0.73	59.86
Prison staff	945	0.74	16.41		0.04	
State prison	773	0.69	76.79	6942	0.86	64.93
Federal BOP facility	184	0.60	56.77	5173	0.48	45.51
Private prison	107	0.50	19.07	14762	0.28	29.71
Female prison	84	0.67	47.05	12626	0.25	27.01
Male prison	793	0.72	82.55	6848	0.93	58.85
Northeast census region	135	0.58	46.44	8619	0.67	62.91
Midwest census region	212	0.71	56.74	10502	1.24	115.05
South census region	534	0.75	82.08	7812	0.63	52.00
West census region	182	0.55	78.29	3754	0.64	21.35
Large facility (>1000)	491	0.84	121.32	6425	1.33	70.18
Medium facility (250-1000)	294	0.62	32.20	4959	0.34	51.52
Small facility (<250)	191	0.38	9.76	15676	0.03	45.20

Table Notes: This table presents summary information for prisons in the UCLA Law (2020) data that have non-missing reports of either COVID-19 cases or COVID-19 related deaths and that we are able to link to a facility ID variable in the 2012 CSFACF data (United States Bureau of Justice Statistics 2020). The first column counts the number of unique prisons for which we have the information indicated in the row (and are of the type of facility indicated in the row title for the third row and beyond). The second column displays the fraction of these reporting facilities for which there is at least one COVID-19 case or death reported. The third and fifth columns list the average number of total cases and deaths for all of the facilities reporting, while the fourth and sixth columns calculate the case and deaths per 100,000 prisoners based on the 2012 facility populations in the CSFACF data. All case and death counts include only cases and deaths for inmates with the exception of the second row where the total cases and deaths are reported for correctional staff. Correctional staff counts by facility are not available in the CSFACF data so we are unable to calculate rates per 100,000 correctional staff in the second row.

Table 3 also reveals differences across the relative contributions of different types of facilities to this crisis. State prisons are 9 percentage points more likely to record an outbreak and exhibit higher rates of both COVID-19 cases and deaths compared with federal prisons. Private prisons exhibit the lowest total number of COVID-19 cases – but the highest number of cases per 100,000 people in prisons – compared with facilities that are operated by states or the federal government. This difference may reflect differences in the rate of testing or the types of private facilities we are able to match to facility-level data. The number of deaths per 100,000 reported by private facilities is considerably lower than the rate at prisons operated by state or federal governments.

Prisons in the South represent the largest number of prisons by region as well as the highest number of COVID-19 cases. However, they have case and death rates lower than prisons in the Northeast and Midwest. Interestingly, the average number of deaths is much higher in the Midwest region with an average of 1.24 COVID-19 related deaths per prison (which translates to 115 deaths per 100,000 imprisoned people).

The final group of rows in Table 3 splits facilities into three size categories: large prisons incarcerating more than 1,000 people; medium prisons with populations between 250 and 1,000; and small facilities incarcerating fewer than 250 inmates.⁹ Large facilities are clearly the most important contributors to the COVID-19 crisis in prisons. On average, each of these prisons has more than 120 cases and 1.33 deaths, and only 16% have reported zero cases. Moreover, these 491 large prisons account for 83% of the total cases and 87% of the total number of deaths reported in the UCLA Law (2020) dataset. Small prisons exhibit lower rates of COVID-19 outbreaks, but cases per 100,000 people in prison are high on average due to their small population size.

An analysis of the influence of prison facilities, especially large prisons in more rural counties, is an important area for future research once COVID-19 data is available at a more detailed geographic level and/or when it can be established how cases and deaths in prisons are reported in data aggregated at a community level.

⁹ An incarcerated population of 1,000 is approximately the median size of prisons linked to the 2012 CSFACF.

POLICY IMPLICATIONS, DATA GAPS, AND FUTURE RESEARCH

State and federal prison facilities across the U.S. are COVID-19 hotspots. This report provides a detailed description of the magnitude of the COVID-19 crisis within prisons using the best data available. The figures and tables illustrate substantial variation in the intensity of this crisis both across state jurisdictions as well as across prison facilities that vary by population and the type of organization operating the facility (state government, federal government, or a private corporation). Documenting this variation lays an important foundation for researchers and policymakers to further investigate which policies have been most effective in protecting vulnerable staff and incarcerated populations.

Describing the incidence of COVID-19 infection across different states and types of facilities is also a step toward understanding the association between prison facilities and COVID-19 in surrounding communities. The daily churn of staff and visitors along with the admission and release of imprisoned people may facilitate the spread of the virus both inside and outside the prison. Estimating the relationship between prisons and COVID-19 outcomes in their wider communities was not possible in this report, given data limitations. COVID-19 case and death data are currently only available at the county level. This ignores impacts on smaller communities, which are most likely to be affected by a prison COVID-19 outbreak. Moreover, the county of residence for people entering and leaving custody in state and federal prison facilities is often different from the location of the prison. Finally, at the time of this report it was not clear whether (or when) prison cases and deaths were recorded in the county COVID-19 case and death counts.¹⁰ Therefore, it was not possible to separate COVID-19 outcomes within prisons from those outside of the prison walls in each county. Once more detailed COVID-19 data becomes available, evaluating the impact of COVID-19 prison infections and policy response on community COVID-19 transmission is an important area for future research.

An analysis of COVID-19 within jails was also considered for inclusion in this report. However, case and mortality information is currently only available for a handful of jails.¹¹ COVID-19 in jails presents different issues for the incarcerated population and residents of the surrounding area given the high flow of individuals in and out of these facilities. It is also the case that county jails have been more likely to reduce their populations throughout the COVID-19 crisis. In May, Widra and Wagner (2020) noted that while the typical jail saw population reductions of around 30%, the typical prison only reduced its population by 5%. Evaluating the impact of the variation in flows in and out of jails and prisons on community COVID-19 transmission is another critical topic for future study.

¹⁰ A comparison of facility-level COVID-19 outcomes in several areas with large prisons indicated higher rates of cases or deaths than were reported for counties where the facilities are located. The data reflected outcomes as of August 15, 2020.

¹¹ UCLA Law (2020) is collecting information for several county jails that report COVID-19 cases and/or death information.

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