

Ten Urgent Priorities Based on Lessons Learned From More Than a Half Million Known COVID-19 Cases in US Prisons

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COVID-19 is ravaging US prisons. Prison residents and staff must be prioritized for vaccination, but a rapidly mutating virus and high rates of continued spread require an urgent, coordinated public health response.

Based on knowledge accumulated from the pandemic thus far, we have identified 10 pressing public health priorities for responding to COVID-19 in prisons: (1) accelerate population reduction coupled with community reentry support, (2) improve prison ventilation systems, (3) ensure appropriate mask use, (4) limit transfers between facilities, (5) strengthen partnerships between public health departments and prison leadership, (6) introduce or maintain effective occupational health programs, (7) ensure access to advance care planning processes for incarcerated patients and delineation of patient health care rights, (8) strengthen partnerships between prison leadership and incarcerated people, (9) provide emergency mental health support for prison residents and staff, and (10) commit to public accountability and transparency.

Dedicated prison leaders cannot accomplish these public health priorities alone. We must mobilize prison leaders, staff, and residents; public health departments; community advocates; and policymakers to work together to address the pandemic's outsized impact in US prisons. (*Am J Public Health*. 2021;111:1099–1105. <https://doi.org/10.2105/AJPH.2021.306221>)

The 1918 influenza pandemic demonstrated the calamitous consequences a highly transmissible respiratory pathogen can have in overcrowded prisons, jails, juvenile detention centers, and immigration detention centers (herein referred to as “prisons”).¹ Yet when the COVID-19 pandemic arrived in early 2020, the United States had experienced 5 decades of growth in imprisonment rates. Approximately 2.3 million people were incarcerated (7 times the number held in 1972) across the nation's 7000 facilities, with many prisons populated well above 100% capacity.^{2,3} Intersecting risks related to poverty, racial inequity, and overcrowding and high infection transmissibility of COVID-19 make residents

and staff particularly vulnerable to COVID-19. As the pandemic has raged in US prisons, lessons have emerged that can inform a life-saving public health response.

TOLL OF COVID-19 IN US PRISONS

Over the 6 months following the publication of our July 2020 *AJPH* article, “Prisons: Amplifiers of the COVID-19 Pandemic Hiding in Plain Sight,”⁴ the pandemic took a devastating toll on people who lived or worked in US prisons. Confirmed cases continue to rise at a breathtaking rate, affecting prison residents, staff, their families, and their communities, and challenging the capacity of local health care systems.^{4,5}

In January 2021, 10 months since the United States reported its first death of an incarcerated patient,⁴ more than 510 000 cases of COVID-19 had been reported in prisons, more than double the number reported only 2 months earlier.⁵ COVID-19 has claimed the lives of at least 2200 US prison residents and staff.⁵ In the few states that publicly report cases among youths in juvenile detention centers, at least 3360 cases have been confirmed.⁶ The majority of the United States' largest outbreaks have occurred in prisons. Now, nearly 1 year into the COVID-19 pandemic, it is imperative that we integrate lessons learned from the responses and calls to action into strategic steps to protect prison residents and staff.

Ten Lessons Learned From COVID-19 in Prisons

Lesson	Key Strategies
1. Accelerate population reduction coupled with community reentry support to make space for physical distancing and areas for quarantine and medical isolation	<ul style="list-style-type: none"> • Pursue evidence-based decarceration strategies informed by public health professionals and prison leaders and prevent new incarceration by promoting alternatives to incarceration • Bolster reentry supports by educating people leaving prisons about COVID-19, ensuring access to health insurance, and promoting linkages to community and social services
2. Improve ventilation in housing units and common spaces	<ul style="list-style-type: none"> • Maximize ventilation with outdoor air • Ensure that air ventilation systems meet standards to prevent the spread of COVID-19 in housing units and common spaces and that MERV 13 or higher air filters are used (or the highest MERV-rated filter that the HVAC systems can allow) • Ensure that medical isolation units and quarantine cells are available, when needed, to prevent the spread of COVID-19
3. Ensure appropriate mask use among staff and residents	<ul style="list-style-type: none"> • Ensure access to masks for residents and staff • Ensure that universal mask use with proper fit is nonnegotiable • Provide health education about mask importance, use, and fit
4. Limit transfers between facilities	<ul style="list-style-type: none"> • Avoid transfers between facilities • If a transfer must take place, allow medical staff involvement in transfer policies, use PPE, ensure that screening protocols are in place (i.e., that the resident being transferred does not have COVID-19 or COVID-19 exposure after test administration), and require a 14-day quarantine
5. Strengthen partnerships between public health departments and prison leadership	<ul style="list-style-type: none"> • Encourage frequent, regular meetings between prison and public health leaders to manage COVID-19 • Develop and implement coordinated pandemic preparedness plans for current and future waves
6. Introduce or maintain thoughtful occupational health programs	<ul style="list-style-type: none"> • Promote occupational health programs that are accessible to prison staff by bolstering funding, ensuring access to PPE, ensuring affordability for staff, and applying a nonpunitive approach • Promote a culture of health among prison staff that encourages symptom reporting and behaviors informed by health evidence to prevent COVID-19 transmission
7. Ensure access to advance care planning processes for incarcerated patients and delineation of health care rights	<ul style="list-style-type: none"> • Ensure that advance care planning processes are developed and accessible for residents • Ensure that hospitals caring for prison residents are aware of advance care plans and know patient rights
8. Strengthen partnerships between prison leadership and incarcerated people	<ul style="list-style-type: none"> • Encourage a culture and infrastructure to support partnership with prison residents in responding to COVID-19
9. Provide emergency mental health support for prison residents and staff	<ul style="list-style-type: none"> • Recognize that COVID-19 in prisons is a significant source of stress and psychological trauma • Provide trauma-informed mental health support, including via expanded telehealth mental health visits, and deploy heightened surveillance for suicidality
10. Commit to public accountability and transparency	<ul style="list-style-type: none"> • Mandate data reporting on COVID-19 prison cases • Publicly report procedures for combatting COVID-19 • Promptly conduct outreach to affected families

Note. HVAC = heating, ventilation, and air conditioning; MERV = minimum efficiency reporting value; PPE = personal protective equipment.

URGENT PRIORITIES

National COVID-19 guidelines issued by the Centers for Disease Control and

Prevention (CDC) have provided some guidance to prison leadership during the pandemic.⁷ However, system discoordination and variation between

prisons by prison type, population size, population health status, degree of overcrowding, and quality of facility infrastructure (many buildings are archaic)

have resulted in jurisdictions and facilities using trial and error approaches with varying degrees of success. With the recent availability of vaccines, health experts have called for prison residents and staff to receive priority vaccination.⁸ However, viral mutations, lags in vaccine distribution, and vaccine hesitancy mean that COVID-19 mitigation techniques will be required for months, and likely years, to come. To supplement prompt vaccine education and delivery to staff and residents, we summarize 10 key public health priorities (see [box](#) on p. 1100) needed to respond to COVID-19 in prisons:

- 1 Accelerate population reduction coupled with community reentry support to make more space for physical distancing and areas for quarantine and medical isolation,
- 2 Improve ventilation in housing units and common spaces,
- 3 Ensure appropriate mask use among staff and residents,
- 4 Limit transfers between facilities,
- 5 Strengthen partnerships between public health departments and prison leadership,
- 6 Introduce or maintain thoughtful occupational health programs,
- 7 Ensure access to advance care planning processes for incarcerated patients and delineation of health care rights,
- 8 Strengthen partnerships between prison leadership and incarcerated people,
- 9 Provide emergency mental health support for prison residents and staff, and
- 10 Commit to public accountability and transparency.

Population Reduction and Community Reentry Support

Many jurisdictions, especially early in the pandemic, enacted decarceration strategies to enhance the ability of residents and staff to comply with physical distancing measures to prevent COVID-19 spread.² The National Academy of Sciences declared decarceration the most important public health strategy to minimize the devastating impact of COVID-19 in prisons.² Decarceration can be achieved through a variety of mechanisms, including commutation or release, furlough, or home confinement. Yet, between January and August 2020, population size in postconviction state prisons decreased by only 4%,⁹ a small reduction insufficient for achieving community standard guidelines for physical distancing. A decarceration strategy, informed by public health professionals and prison leaders, is also needed to ensure that sufficient quarantine and medical isolation rooms are available for outbreaks.¹⁰

To drive decarceration, prison health professionals can advocate patients' health needs; public health practitioners can promulgate decarceration policy and alternatives to incarceration to prevent new incarceration; and, when necessary, health care professionals can serve as medical experts in litigation to improve prison conditions or achieve decarceration. Academic and community clinicians can advise on prognostication and medical documentation for courts to guide decarceration efforts.^{11,12}

Rapid decarceration must go hand in hand with adequate reentry support and planning.^{12,13} Before the COVID-19 pandemic began, the risk of death among formerly incarcerated individuals within 2 weeks of release was 12.7 times

higher than that among other state residents.¹⁴ During the pandemic, mortality risk is further heightened, as discharges may be rushed, community resources may be limited, and community COVID-19 transmission may occur. Roadmaps for emergency discharge planning during the pandemic have been developed.^{2,12} Priorities include educating people leaving prisons about COVID-19, activating public health insurance benefits for eligible individuals, and ensuring linkages to community health services.^{9,12} We recommend prioritizing addiction treatment and taking advantage of prescribing flexibilities during the pandemic, such as using televisits for prescribing treatment of opioid use disorder. Assistance with accessing community resources—such as food stamps, housing, and crisis support to prevent drug overdose, suicide, or recidivism—is also crucial.¹² Although decarceration should be prioritized in the pandemic, it is equally important to bolster reentry supports to prevent COVID-19 transmission, serious adverse health outcomes, and recidivism.

Ventilation in Housing Units and Common Spaces

In many prisons, residents share a small (~4 by 10 foot) cell, oftentimes with a barred door, leaving few options to achieve the physical distance recommended for the general public. Further, even single cells with solid doors can function like a shared dorm if heating, ventilation, and air conditioning (HVAC) units are not up to code. Many residents actively participate in limiting the spread of COVID-19 through cleaning and disinfection efforts. However, given the importance of preventing aerosol transmission of COVID-19, sweeping structural measures in many facilities

are urgently needed to maximize ventilation with outdoor air and upgrade HVAC system filters to minimum efficiency reporting value (MERV) 13 air filters or to the highest MERV-rated filter that the HVAC system can allow.¹⁵ Such measures are of particular importance in cells designated for medical isolation or quarantine. To halt COVID-19 spread, HVAC systems should be upgraded to hospital-level quality to ensure that residents and staff are not breathing inadequately filtered air.

Appropriate Mask Use Among Staff and Residents

Although mask wearing has become politicized, proper mask use must be nonnegotiable in prisons because it can prevent COVID-19 transmissibility by greater than 70%.¹⁶ Depending on degree of spread in facilities and HVAC system adequacy, many prisons are opting for KN95 or N95 mask use. Staff should wear masks properly at all times, including in breakrooms unless staff are alone, and remove them only for eating and drinking. For residents, mask wearing at all times is infeasible (e.g., when eating, bathing, or sleeping). Inability to adhere to universal masking mandates because of dormitory living further justifies decarceration during the pandemic. Simultaneously, encouraging mask wearing in prisons via public health education about mask use importance and fit, consistent guidelines, incentivization efforts, and, if needed, reasonable disciplinary action for staff and residents who refuse masks is needed so that proper mask use becomes an expected and explicit norm.¹⁷

Transfers Between Facilities

Prison-to-prison transfers (and facility-to-facility transfers within prisons) have

led to numerous COVID-19 outbreaks. Between June and August 2020, San Quentin California State Prison, which held 3362 people and was at 109% design capacity in mid-July,¹⁸ had one of the largest outbreak clusters of COVID-19 in the United States at the time, with confirmed cases in at least 2 of 3 residents and 28 resident deaths.¹⁹ The outbreak began when 121 patients from another state facility with an outbreak were transferred to the COVID-naïve San Quentin facility.¹⁹ Data across facilities indicate that transfers should stop, with few being absolutely necessary.²⁰ Prison medical staff should be consulted on transfer decisions and protocols. Transfers should be accompanied by rigorous testing strategies, use of personal protective equipment during transfer, screening protocols, and 14-day quarantine.

Public Health and Prison Partnerships

The COVID-19 pandemic has brought to the fore the importance of agile coordination between prison leadership and public health departments. Many local public health departments have been in near-constant communication with area prisons to coordinate testing. Yet, many states have tested less than 10% of their prison populations and others have not made testing results public, obscuring the true scope of the pandemic in prisons and hampering community health system responses.²¹ During the pandemic, prison health should be an active concern of public health departments, especially regarding rapid testing, data transparency, vaccination distribution, emergency workforce replacement for health care staff sick days, coordination of hospital transfers, and emergency access to Medicaid and housing when needed for people released

to the community. Such partnerships can turn their attention after the pandemic to optimizing future preparedness and addressing health disparities plaguing residents of the justice system.⁴

Thoughtful Occupational Health Programs

When the pandemic began, many prison occupational health programs were unequipped to respond to a health crisis of such magnitude.^{4,22} Prison medical directors were called on to protect the health of prison residents *and* staff (essentially doubling patient care responsibilities). Decisions regarding staff exposures, symptom monitoring, testing, and guidance regarding return to work or mask wearing needed to be made quickly, although there was insufficient infrastructure support. Many prison medical leaders have also been tasked with vaccine education and delivery for prison staff. Funding to bolster prison occupational health programs is crucial. At a minimum, prison occupational health programs should guarantee that prison staff have access to adequate personal protective equipment as well as sick days and free or affordable health services, and encourage staff to report symptoms and stay home when sick or exposed.²²

Planning and Delineating Health Care Rights

Older adults and people with significant medical conditions (i.e., those with highest risk of developing a severe case of COVID-19) comprise a growing proportion of the US prison population.⁴ The pandemic has reinforced the importance of access to advance care planning for incarcerated patients, especially for older adults and people with

serious illnesses. Such advance care planning processes should include clear, in-depth conversations with a primary health care professional to clarify patients' health care wishes and to guide them in the selection of a medical proxy decision maker in case of future need.

The pandemic has also demonstrated the importance of community hospital health care professionals understanding the rights of hospitalized incarcerated patients. For example, confusion exists among hospitalists about whether and when hospitalized incarcerated patients can communicate or visit with loved ones. Guidelines exist for community health care professionals to clarify the tenets of ethical care for incarcerated patients.²³ A structured partnership and clear communication between prison leaders, prison health care professionals, and community hospital administrators are needed. These will ensure that adequate advance care plans can be accessed upon hospital transfer and are systematically communicated with community health care professionals upon hospitalization and that protocols and procedures to provide access to family and loved ones are in place for incarcerated patients hospitalized with COVID-19.²³ Moreover, many national standards limit or prohibit the use of shackles for pregnant women in custody who are in labor in community hospitals. The pandemic has made clear the vital need for medical professionals to enact similar limits on the use of shackles for people who are dying or seriously ill in community hospitals.²⁴

Partnerships with Prison Residents

Partnerships forged between prison residents and prison leaders can be key to safeguarding health in a prison,

especially during a pandemic. At a minimum, prison administrators' recognition of failures to treat residents and families with respect is a necessary component of quality medical care, as is proper representation of patients' voices, acknowledgment of power imbalances, and identification of shared health-related goals. Collective practices, such as the meaningful use of ideas generated in inmate advisory councils and family councils, can help shift prison culture toward productive partnerships. Residents are living with constant fear of COVID-19, and it is imperative that prison and medical leadership engage in meaningful dialogue with residents and families to elicit ideas that can improve day-to-day life and the physical and mental health of residents.

Emergency Mental Health Support

Because they have higher rates of mental health challenges and substance use disorders compared with the general US population, many prison residents and staff, who are already overburdened by traumatic experiences, are suffering the compounded, exhausting effects of enduring the pandemic in prisons. Prison staff are putting themselves, their households, and their communities at risk, which further exacerbates the stress of working in prisons. In response to the constant stress and fear associated with living and working in infection hotbeds, emergency mental health support services for residents and staff are needed. Expanded telehealth mental health visits and heightened surveillance for suicidality should be deployed. Community mental health agencies can also assist. Although the

acknowledgment of ongoing stress and the provision of online resources are a start, our consultation with experts suggests that a prompt and proactive trauma-informed response is needed.

Public Accountability and Transparency

Many prisons have made great efforts to adhere to emerging CDC recommendations regarding COVID-19 in prisons.⁷ The National Commission of Correctional Health Care also provided early guidance on standards of care related to COVID-19²⁵; however, accreditation with the commission is voluntary and most US prisons are not accredited. Residents, family members, advocates, and attorneys have voiced concerns about variation in practice across prisons and lack of transparency regarding COVID-19 infection control measures in US prisons. In particular, the lack of information available about COVID-19 prevention and care approaches in immigration detention centers underscores the urgent need for improved transparency from these agencies. Some prisons and related government agencies published early tracking of COVID-19 testing and policies.^{4,19} These positive outliers demonstrate that it is possible to increase transparency and accountability in maintaining standards of care during the pandemic. Researchers and public health departments can use such data to measure the pandemic's scope and guide resource allocation to optimize a coordinated, data-driven response. Experiences to date suggest that government mandates through legislation are worth pursuing to achieve timely and accurate reporting about COVID-19 in prisons.

CONCLUSIONS

The COVID-19 pandemic has created an infectious disease crisis in the setting of what was already a public health travesty—mass incarceration. As the public health community battles the pandemic and prepares for a resurgence of COVID-19, addressing the poverty, racial inequality, and historical oppression that fuel mass incarceration will be crucial. If public health lessons learned from the pandemic in prisons are properly applied, COVID-19 can be an impetus to promulgate overdue justice reform and interventions that promote health equity. As the world awaits widespread distribution of vaccines and more effective antiviral therapies, the public health community has a vital role to play in creating the conditions that best protect the human rights and health of prison residents and staff in all types of prison settings. Many of these lessons could have been learned after the 1918 influenza pandemic. We must not squander the lessons learned from the 2020 COVID-19 pandemic. *AJPH*

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

No protocol approval was necessary because no human participants were involved in this study.

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