


Invited Perspective: Uncovering Harmful Exposures in Carceral Environments

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In a research letter in this issue, Rempel et al. compared community water systems that serve the Kern Valley State Prison (KVSP) and three comparable rural communities in California that rely solely on groundwater sources.¹ They found that for each of the four systems, arsenic concentrations in drinking water periodically exceeded the legal limit in violation of Safe Drinking Water Act regulations. The communities neighboring the prison benefited from local and federal remediation efforts. Yet, for people who were incarcerated, interventions such as free bottled water were often restricted.

Black and Latinx people are arrested by law enforcement and incarcerated more often and for longer periods of time than their White counterparts.² An important consideration is that this difference in arrest frequency and incarceration periods does not reflect disproportionate illegal activity; rather, communities of color are patrolled and punished more stringently.³ The lack of access to clean water and possible remediations for incarcerated people, based on the disproportionate targeting of certain communities, disparately impacts Black people and exacerbates racial health disparities. Therefore, we agree with Rempel et al. that more granular assessments of water composition are necessary, especially in marginalized communities, and that, in general, more data relevant to carceral populations should be available. Furthermore, the findings by Rempel et al. lend more weight to the need for decarceration: Carceral contexts make people sick.¹

People who are incarcerated in the United States experience conditions of confinement that exacerbate poor health outcomes. They also have a disproportionate burden of chronic illness and a high risk of mortality after release.⁴ A large body of literature connects incarceration and poor health outcomes. Most epidemiological studies have measured incarceration simplistically as a binary or time-varying exposure to assess its health-related effects on individuals, families, and communities.^{5–7} Due to a variety of barriers, public health research has insufficiently accounted for how conditions of confinement—the social and material conditions within carceral environments—contribute to health inequities. Furthermore, incarcerated people are largely excluded from national disease registries and population surveys that governments rely on to understand determinants of and mobilizing solutions to disparities.

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In the United States, there is a lack of external oversight bodies with the power necessary to hold carceral actors accountable for exposing incarcerated people to environmental hazards that they are powerless to avoid. As a result, litigation has been the primary tool for addressing environmental hazards in jails and prisons but is often a time- and resource-intensive endeavor that results in inadequate remedies. Indeed, ailments related to polluted drinking water in prisons are frequent topics of litigation in courtrooms across the country.^{8–10}

The findings by Rempel et al. have important implications for an emerging body of scholarship focused on intersections of environmental justice, racial justice, and prison abolition. Many prisons were built in impoverished rural communities in landscapes where abandoned coal mines and toxic waste sites had been located^{11,12} but have largely evaded scrutiny by environmental protection agencies and health departments. In addition, prisons are plagued by aging infrastructure that is deteriorating in the wake of more frequent hurricanes, flooding, and wildfires linked to climate change.^{13,14} The public health and humanitarian crisis that ravaged jails and prisons during the COVID-19 pandemic put into plain view the hazardous, inhumane, and unhealthy features of carceral environments. For example, an investigation of the 2020 outbreak at San Quentin State Prison revealed that the facility's HVAC system was essentially pumping droplets of the coronavirus into prison cells and crowded communal spaces.¹⁵

Additional research is needed to convey the scale of environmental hazards in the built environments of carceral spaces—such as exposures to lead, toxicants, and carcinogens; extreme heat or cold; water- and blood-borne pathogens—that threaten the health and violate the human rights of incarcerated people. Such empirical evidence is crucial for building the case for improving habitability of and decommissioning and closing carceral institutions as a public health imperative.

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