The world this week

News in focus



COVID-19 has been tearing through San Quentin State Prison in California since early June.

SAN QUENTIN PRISON TURNED DOWN FREE CORONAVIRUS TESTS AND URGENT ADVICE BEFORE ITS MASSIVE OUTBREAK

The iconic prison is dealing with the second-largest coronavirus outbreak in the United States. Researchers fear that other institutions are at risk.

By Amy Maxmen

ngie Stapp read the letter that her son, Ryder, had sent from San Quentin State Prison several times. "I think it's just a matter of time before everyone catches it," he wrote, as COVID-19 ripped through the jail.

"I can't sleep," Angie says. "I feel completely helpless – it's horrible."

Since the first cases of COVID-19 were reported at the California prison 6 weeks ago, more than half of the inmates and staff – some 2,000 people – have tested positive. Nine have died. Researchers in the surrounding San Francisco Bay Area say it didn't have to be this way. For the past four months, they have been offering prison officials free tests for the coronavirus, guidelines for protecting prisons from the pandemic, and increasingly frantic warnings that trouble was coming. Law firms filed motions in federal court, requesting that California governor Gavin Newsom compel the state's prisons to heed expert advice. Two core recommendations have been to test staff and inmates frequently, and to release prisoners so that there is sufficient room to isolate cases, quarantine those who might be infected and provide adequate space between inmates. The court denied the motions and correctional facilities have not fully implemented the measures.

Now that the outbreak has exploded at San Quentin, and hospitalizations in the area are rising, lawmakers are paying attention. On 1 July, California's senators held a hearing to identify what went wrong – emphasizing the risk that such outbreaks pose to the communities surrounding the institutions.

"We have pushed for a scientific response from the very beginning," says Brie Williams, the director of Amend, a group at the University of California, San Francisco (UCSF), that consults on health care at California's prisons.

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California's oldest prison, San Quentin, typically operates at well over 100% capacity.

"That science is being overshadowed by the politics of our society's refusal to understand that it is not business as usual right now."

A dangerous transfer

San Quentin got through most of May without a single reported case of COVID-19 among inmates. But another facility, the California Institution for Men in Chino, was dealing with an outbreak. To protect at-risk inmates there, prison officials moved some 120 prisoners aged over 65 or with underlying medical conditions to San Quentin. Many hadn't been tested in the week before the transfer, providing ample time for them to become infected.

Soon after their arrival at San Quentin, some of the men showed symptoms. After 25 tested positive, a federal court appointee, J. Clark Kelso, who oversees medical care at California's prisons, asked Williams and her colleagues at the University of California, Berkeley, to visit and advise on San Quentin. The federal court oversees health care at California's state prisons owing to a 2005 ruling that found that the prison health-care delivery system violates the constitution's ban on cruel and unusual punishment. What the researchers found on 13 June was concerning.

One section of the 170-year-old facility holds hundreds of men in five tiers of small cells. Some of them were yelling for help through the open grates in the cell walls, says Sandra McCoy, an epidemiologist at Berkeley who was among the visiting researchers. In a subsequent urgent memo, the team wrote: "Ventilation is poor – windows have been welded shut and the fan system does not appear to have been turned on for years."

What's more, San Quentin was running out of rooms in which to isolate people with the disease, she says, and was unable to adequately quarantine those who were waiting for test results. The researchers wrote that San Quentin's population needed to be reduced by half immediately. Failing to do so, the team wrote, "will have dire implications for the health of people incarcerated at San Quentin, custody, staff and the healthcare capacity of Bay Area hospitals".

There was no such reduction, and reported cases skyrocketed from 198 on the day of the memo to 1,389 in 2 weeks. "We dropped everything to visit and write this report because we wanted to save lives," says McCoy. "So what we see now is heartbreaking."

Testing logjam

Nine out of the ten largest outbreaks in the United States have been associated with prisons, according to a list maintained by *The New York Times*. With prison outbreaks flaring up in the country in March, Fyodor Urnov, a scientific director at the Innovative Genomics Institute at Berkeley, offered free, philanthropy-supported COVID-19 testing services to San Quentin. "The reply was a polite, respectful 'Thank you, but we're all set for now,''' Urnov says. He wrote to San Quentin officials again when the outbreak emerged in June, and got a similar response.

Researchers at another authorized testing lab, run by UCSF and the Chan Zuckerberg Biohub in San Francisco, also offered free tests to San Quentin officials in May and June, says a researcher at the lab who asked not to be named because they do not have permission to speak on behalf of the institutes. Those offers were not taken up until last week, when the prison sent them a batch of samples to process. "I'm frustrated and sad we couldn't have done more," says the researcher.

San Quentin's officials didn't respond

to *Nature*'s request for comment. But the California Department of Corrections and Rehabilitation (CDCR) replied that it has "worked tirelessly to implement measures to protect staff, the incarcerated population and the community at-large". It says that it has expedited the release of 3,500 inmates across California's prisons, and added that Kelso oversees testing.

At the 1 July hearing, Kelso said that the CDCR lacked testing resources in March and April, and, more recently, "had testing turnaround time problems".

CDCR secretary Ralph Diaz said, "It is difficult to receive and obtain contracts to be able to sufficiently test all staff members at all institutions."

In the urgent memo, the UCSF and Berkeley researchers provide a more detailed account of the situation. On their visit, Stefano Bertozzi, a health-policy expert at Berkeley, learnt that the prison was reliant on one clinical corporation, Quest Diagnostics, for testing because its software for health records interfaces directly with the prison's. Quest has been intermittently backlogged throughout the outbreak, resulting in slow testing turnaround times. (Quest declined to comment on specific clients.)

Bertozzi explains that to send samples to other laboratories, San Quentin might need to alter its software or manually enter results into electronic records. In the memo, the researchers suggest that the prison finds extra support to help transfer results from new testing providers.

Urnov worries that this testing debacle will occur at other prisons and group-living facilities across the country. To prevent it, he says that health departments should canvass the growing number of testing providers in their states so that they can link them to institutions that need a back-up provider during a surge.

Tinderboxes everywhere

At least 62 inmates from San Quentin are now at hospitals outside the prison, according to the CDCR. The prison has installed tents outside to be used as medical stations for sick inmates and those who should be isolated or quarantined. Diaz said that the prison would expedite the release of inmates with fewer than 180 days left on their sentences, and some of those at risk of severe COVID-19 who are incarcerated for non-violent crimes.

Bertozzi and his colleagues are now asking policymakers to prevent this tragedy from happening elsewhere. California's Folsom State Prison has the same overcrowding and century-old architecture that made San Quentin a tinderbox, he says. And two prisons for inmates with health problems, the California Medical Facility in Vacaville and the California Health Care Facility in Stockton, are extremely vulnerable. "What's happening is tragic," Bertozzi says. "It's also predictable."