



California Prisons' Naloxone Distribution

Implementation of The California Department of Corrections and Rehabilitation and California Correctional Health Care Service's Naloxone Distribution Program

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**CALIFORNIA CORRECTIONAL
HEALTH CARE SERVICES**

This report was prepared by: The California Department of Corrections and Rehabilitation
& California Correctional Health Care Services

Denise M. Allen, MA, MS, Research Specialist IV
Integrated Substance Use Disorder Treatment Program
California Correctional Health Care Services

John Dunlap, DO, Deputy Medical Executive
Quality Management Unit
California Correctional Health Care Services

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Background

Amidst the opioid epidemic in the United States (U.S.), the Centers for Disease Control and Prevention (CDC) reported more than 100,000 drug overdose deaths in 2021, an increase of nearly 15% from 2020. Opioids are overwhelmingly the leading cause of overdose death in the U.S., increasing from just over 70,000 in 2020 to nearly 81,000 in 2021. Provisional CDC data from the 12-months ending in February 2021 compared to the 12-months ending in February 2022 shows the number of drug overdose deaths continues to rise, and are up an estimated 12%. According to the CDC, the spike in opioid overdose deaths is attributable to increases in the availability of synthetic opioids (primarily fentanyl).^{1 2 3}

Incarcerated and formerly incarcerated individuals are disproportionately impacted by opioid use disorder (OUD), and are at high-risk of overdose death. The transition from incarceration (jail and prison) back into the community is a particularly dangerous time for individuals with OUD whose tolerance for opioids has been reduced during incarceration. Studies show an increased risk of drug-related death soon after release from prison, particularly in the first two-weeks following release, with the opioid overdose death rate 40 times higher among those recently released from incarceration compared to the rest of the adult population. Opioid-related overdose mortality is the leading cause of death among people released from incarceration. Notably, the risk of overdose death among formerly incarcerated individuals remains high for two-years following release.^{4 5 6 7 8}

The U.S. Department of Health and Human Services has identified naloxone distribution as a top strategy for combating the opioid epidemic. Naloxone reverses an opioid overdose when given intranasally or intramuscularly. Naloxone is an opioid antagonist - meaning that it attaches to opioid receptors and reverses and blocks the effects of other opioids. Naloxone is safe, effective, and non-addictive, and has a rapid on-set of action. It can quickly restore normal breathing to an individual if their breathing has slowed or stopped due to an opioid overdose.⁹ However, to be effective, naloxone must be administered at the time of the overdose.¹⁰ Due to the efficacy of naloxone in reducing overdose deaths, Department of Corrections across the U.S. are scaling-up the distribution of naloxone to those releasing from incarceration, with some providing naloxone to those identified as high-risk for overdose (those with

¹ https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/202205.htm

² <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

³ <https://nchstats.com/2022/07/13/update-to-provisional-drug-overdose-deaths-from-12-months-ending-in-february-2022/#:~:text=Provisional%20data%20show%20that%20the,2022%2C%20from%2097%2C109%20to%20108%2C642.>

⁴ <https://www.mass.gov/doc/chapter-55-report-excerpt/download>

⁵ <https://pubmed.ncbi.nlm.nih.gov/20579009/>

⁶ <https://www.michigan.gov/>

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2955973/>

⁸ <https://ascpijournal.biomedcentral.com/articles/10.1186/s13722-019-0145-5>

⁹ <https://nida.nih.gov/publications/drugfacts/naloxone>

¹⁰ <https://ldi.upenn.edu/our-work/research-updates/expanding-access-to-naloxone-a-review-of-distribution-strategies/>

OID or known heroin or injection drug use) or vulnerable populations (pregnant women or the unhoused).^{11 12 13} California is now offering naloxone to everyone releasing from state prison.

Purpose

In April 2020, the California Correctional Health Care Services (CCHCS) began offering naloxone (Narcan nasal spray) and patient education regarding its use to all individuals releasing from the California Department of Corrections and Rehabilitation (CDCR). CDCR/CCHCS' implementation of naloxone distribution is part of a larger effort to address substance use disorders (SUDs) among CDCR residents through the Department's Integrated Substance Use Disorder Treatment (ISUDT) Program implemented in January 2020. The ISUDT Program focuses on screening, assessment, and linkage to evidenced-based SUD treatment in prison (behavioral interventions and medication-assisted treatment - MAT), with a targeted focus on strengthening continuity of care post-release under Enhanced Pre-release and Transition Services (a component of the ISUDT Program), which encompasses the provision of naloxone at release. Program goals include saving lives, reducing avoidable health complications and costs, improving public safety, and promoting healthier communities. The ISUDT Program's preliminary outcomes show positive results, including nearly a 60% reduction in overdose deaths following implementation.¹⁴ The focus of this briefing is the implementation of CDCR/CCHCS' naloxone distribution, patient education efforts, data on acceptance among CDCR releases, and the potential for future research to examine effects of naloxone on post-release mortality (overdose death rates among individuals released from CDCR).

Implementation of Naloxone Distribution

To date, all states and the District of Columbia have enacted laws related to use and dispensing of naloxone to treat opioid overdose. Nearly every state permits pharmacies to provide naloxone to anyone who wants it without a prescription. Notably, all states have authorized the use of naloxone by first responders (i.e., paramedics, firefighters, and police). The National Commission on Correctional Health Care recognizes the critical role correctional facilities play in preventing overdose deaths, and promote the use and acceptance of correctional education and naloxone distribution programs in prisons and jails to reduce overdose mortality.^{15 16}



In 2018, the State of California signed Assembly Bill 2760 into law requiring medical prescribers to offer a naloxone prescription (or equivalent) to certain populations at higher risk of opioid overdose (i.e. patients being dispensed opiate prescriptions).¹⁷ In 2018 and 2019, prior the implementation of the ISUDT Program, CCHCS began dispensing naloxone as a discharge medication to individuals who were

¹¹ <https://www.michigan.gov/-/media/Project/Websites/mdhhs/Folder4/Folder28/Folder3/Folder128/Folder2/Folder228/Folder1/Folder328/Michigan-Opioids-Task-Force-Report.pdf?rev=3e06433a5544a59eb6969979051b5b>

¹² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7349469/>

¹³ <https://pubmed.ncbi.nlm.nih.gov/30576883/>

¹⁴ <https://cchcs.ca.gov/wp-content/uploads/sites/60/ISUDT/Impacts-ISUDT-Program2019-22.pdf>

¹⁵ <https://www.ncchc.org/naloxone-in-correctional-facilities-for-the-prevention-of-opioid-overdose-deaths-2020/>

¹⁶ <https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions/naloxone>

¹⁷ <https://www.mbc.ca.gov/Download/Documents/AB2760FAQs.pdf>

prescribed opiates at release from state prison. Naloxone administered at the time of release from CDCR in 2020 increased by 35 times compared to 2019.¹⁸

CDCR/CCHCS' naloxone distribution is provided through a standing order that went into effect December 2019. The standing order covers the entire prison population at the time of release, and requires nursing staff to offer patient education and a naloxone kit (containing two-doses). This process has been codified in CCHCS' Health Care Operations Department Manual, *Medications upon Release*,. CCHCS' standing order is modeled after the standing order issued by the California Department of Public Health (CDPH) which allows the distribution of naloxone to a person at risk of an opioid-related overdose or to a family member, friend, or other person in a position to assist; and allows for the administration of naloxone by a family member, friend, or other person to a person experiencing or reasonably suspected of experiencing an opioid overdose.¹⁹ Statewide Continuing Medical Education was provided to CCHCS staff regarding the expectation of the provision of naloxone at release, and CDCR custody staff supervisors receive naloxone training, and carry naloxone.

Patient Education

Overdose education and naloxone distribution has been shown to increase the reversal of potentially fatal overdoses, with research demonstrating that opioid overdose death rates are 27 to 46% lower in communities where overdose education and naloxone distribution programs have been implemented.²⁰ A naloxone distribution study in the San Francisco County Jail reported that over a four-year period, 67% of individuals received naloxone upon release, and 44% received refills from community-based programs after reentry. The study found that 11% of participants reported using naloxone during an overdose, with nearly 90% of these overdoses reversed, and that brief naloxone education has been shown to be sufficient to improve comfort and competence in recognizing and managing overdoses.^{21 22}



Given the efficacy of naloxone education and distribution, CDCR/CCHCS have placed emphasis on its Enhanced Pre-release and Transition Services, under its ISUDT Program, and the provision of naloxone patient education and the kits at release. CCHCS nursing staff provide standardized naloxone patient education to all releases. This includes discussing the risks of opioid overdose, the signs and symptoms, and opioid overdose prevention. Patient materials

include step-by-step instructions with pictures on how to perform rescue breathing, instructions for calling emergency services (911), and naloxone administration.

Naloxone Acceptance Among CDCR Releases

Previous studies of incarcerated populations and of individuals recently released from prison have found 88 to 90% of individuals reported being willing to administer naloxone to a peer or friend in the event of

¹⁸ In 2018, naloxone was dispensed 2 times out of 34,289 releases, in 2019 naloxone was dispensed 513 times out of 34,518 releases, and by 2020 this grew to 18,140 out of 36,670 (or 49%) of releases. In 2021, 18,748 out of 24,119 releases (78%) were dispensed naloxone, and as of September 2022, 20,742 out of 24,588 releases (84%) were dispensed naloxone at release.

¹⁹ <https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/SACB/CDPH%20Document%20Library/Naloxone/Naloxone%20FAQs%20062118.pdf>

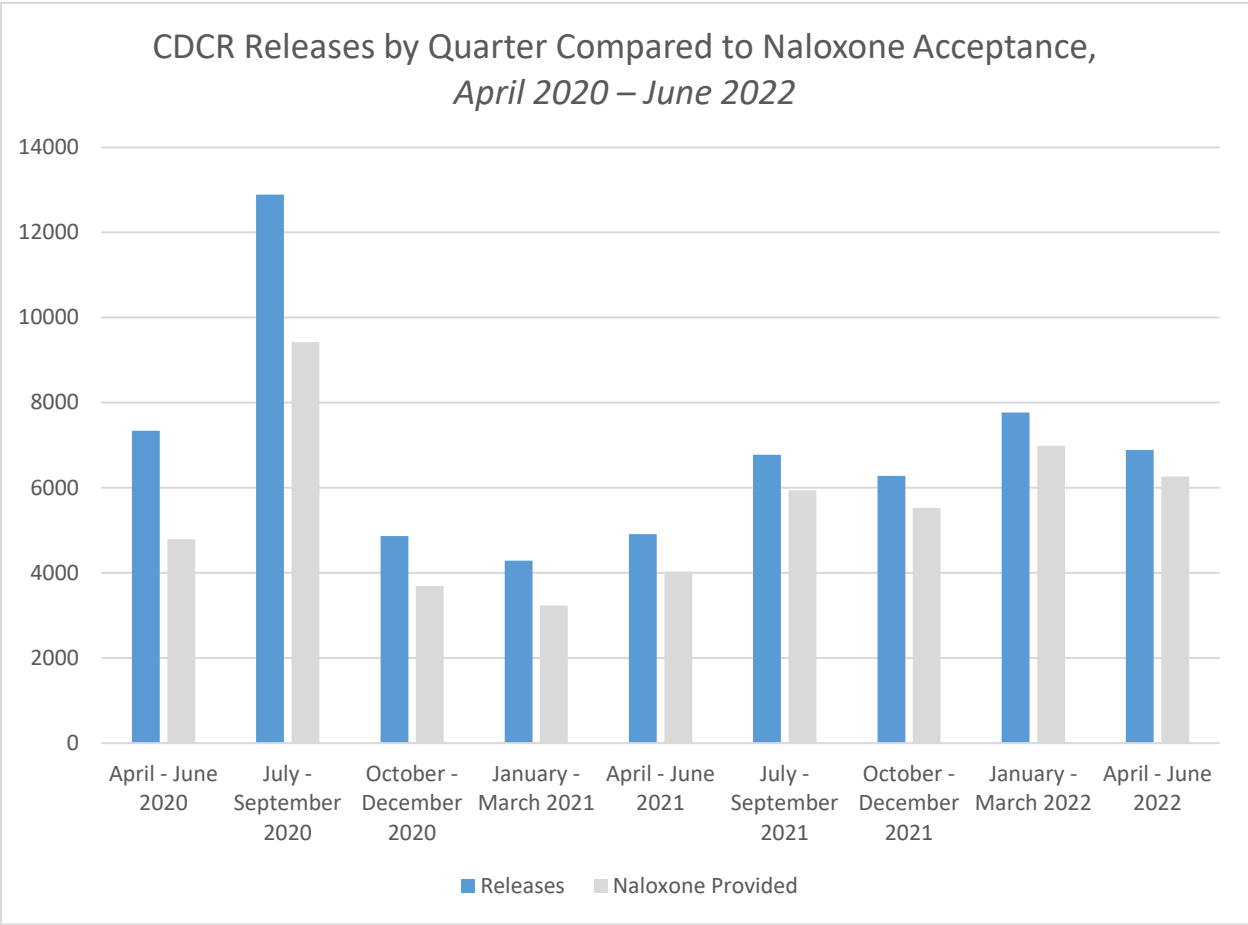
²⁰ <https://nida.nih.gov/publications/drugfacts/naloxone#:~:text=Overall%2C%20naloxone%20is%20a%20safe,drugs%20like%20cocaine%20or%20methamphetamine.>

²¹ <https://pubmed.ncbi.nlm.nih.gov/31672075/>

²² <https://nida.nih.gov/publications/research-reports/medications-to-treat-opioid-addiction/naloxone-accessible>

an overdose.²³ Data from the New York Department of Corrections showed that more than two-thirds (68%) of incarcerated individuals who were trained in overdose prevention at the Queensboro and Wallkill facilities accepted naloxone at release. Notably, these facilities used different distribution strategies for naloxone, with Queensboro having people affirmatively opt-in to take a kit at release, and Wallkill placing naloxone in the materials given to all releases and having people opt-out of taking naloxone. This resulted in 59% of individuals taking naloxone at Queensboro and 88% of individuals taking naloxone at Wallkill.²⁴

Similar to the naloxone distribution strategy at New York’s Wallkill facility, CCHCS utilizes an opt-out distribution method – meaning naloxone patient education and the kits have become a standard part of release processes, and are offered to all CDCR releases. Therefore, an individual would have to decline an order not to receive it. This strategy has proven effective for CCHCS with data from implementation of naloxone patient education and distribution in April 2020 through June 2022 showing that out of 62,008 CDCR releases, 80% (49,889) have accepted naloxone. Even more promising, of the 7,625 individuals on MAT at the time of release (who are at a particularly high-risk of overdose), 89% (6,763) have accepted naloxone (See Figure 1 below).



²³ <https://harmreductionjournal.biomedcentral.com/track/pdf/10.1186/s12954-018-0255-5.pdf>

²⁴ <https://www.vera.org/publications/corrections-responses-to-opioid-epidemic-new-york-state>

Data from July 2022 shows that the positive trend presented in Figure 1 above is continuing with 2,199 out of 2,311 releases (95%) for that month accepting naloxone patient education and the kits offered at release. Of this, 466 individuals were on MAT at the time of release in July, and 436 (94%) were offered and accepted naloxone at release.

Future Research and Evaluation

CDCR/CCHCS data on naloxone acceptance are consistent with data from similar programs which indicate that a majority of those releasing from incarceration (81%) reported willingness to undertake naloxone training prior to release, willing to resuscitate a friend using the kit if they were trained (94%), and to be revived by a trained peer (91%).²⁵

However, there is a need for CDCR/CCHCS to develop an understanding of the impacts of naloxone patient education and the provision of kits beyond acceptance. To understand effectiveness, it is critical for CDCR/CCHCS to examine post-release overdose mortality among individuals formerly incarcerated in CDCR who received naloxone patient education and kits compared to those who did not. This is important for several reasons, including enabling CDCR/CCHCS to work with partner agencies to formulate overdose prevention strategies post-release as well as address health equity issues. There is a significant health equity issue related to higher overdose mortality rates in lower income communities where the formerly incarcerated often live.²⁶ Health inequities can contribute to increased overdose deaths and other negative health outcomes, especially among historically marginalized populations (minority groups, people with mental health issues, those with disabilities, people from lower income communities, and the formerly incarcerated). According to the CDC, there appears to be health equity issues in response to the drug overdose epidemic occurring in the U.S.²⁷ Understanding these data, specific to CDCR releases, can help to improve the allocation of services at the community-level.

CCHCS is in the process of developing data sharing agreements with other California state agencies to enable these types of evaluative efforts. Since CDCR/CCHCS naloxone patient education and kits is robust, it is important to determine if goals are being achieved - saving lives, reducing avoidable health complications and costs, improving public safety, and promoting healthier communities. The CDCR/CCHCS naloxone acceptance trends are promising, and have the potential to significantly mitigate disparities in overdose mortality and improve outcomes among the formerly incarcerated making these proposed evaluation efforts a critical priority.

²⁵ <https://pubmed.ncbi.nlm.nih.gov/30241532/>

²⁶ <https://www.commonwealthfund.org/blog/2022/too-many-lives-lost-comparing-overdose-mortality-rates-policy-solutions>

²⁷ <https://www.cdc.gov/drugoverdose/health-equity/info.html>