ADDRESSING OPIOID USE DISORDERS IN CORRECTIONS: A SURVEY OF ILLINOIS JAILS

ILLINOIS CRIMINAL JUSTICE INFORMATION AUTHORITY
CENTER FOR JUSTICE RESEARCH AND EVALUATION

JESSICA REICHERT, SENIOR RESEARCH ANALYST
LAUREN WEISNER, RESEARCH INTERN
TYLER MARCHESCHI, RESEARCH INTERN
LILY GLEICHER, RESEARCH ANALYST
SHARYN ADAMS, RESEARCH ANALYST

Abstract: Even with substantial efforts at the state and local levels, opioid overdoses in Illinois continue to rise. Many in jails and prisons suffer from opioid use disorders and some receive treatment. Upon release, the risk of overdose is enhanced due to reduced tolerance. This article presents findings from a survey of 36 Illinois jail administrators on the use of medication-assisted treatment for detainees with opioid use disorders, naloxone distribution to reduce post-release overdose, and policies to ensure safe withdrawal from opioids and other drugs.
Introduction

An estimated 63 percent of sentenced jail inmates meet criteria for having substance use disorders (SUD) compared to 9 percent in the general population.¹ These individuals are more likely to have additional contacts with the criminal justice system and re-offend upon release compared to those without SUD.² In 2013, the Arrestee Drug Abuse Monitoring (ADAM) Program collected drug use data from arrestees booked into detention or jail in Cook and five other counties across the country. The program found 83 percent of adult male arrestees in the Chicago sample tested positive for illicit drugs, more than the 60 percent collectively testing positive in 10 other jurisdictions.³

STATE OF ILLINOIS OPIOID ACTION PLAN

The State of Illinois Opioid Action Plan outlines priorities and strategies to reduce opioid deaths in Illinois by 33 percent in three years. One priority is supporting justice-involved populations. A key strategy of that priority is decreasing the number of opioid overdose deaths immediately following release from correctional facilities.

Source: State of Illinois Opioid Action Plan⁴

Illinois Criminal Justice Information Authority researchers examined how county jails in Illinois are responding to detainees with opioid use disorder. Researchers surveyed jail administrators to better understand their use of medications, naloxone distribution, and policy for safe opioid withdrawal within their populations.

Review of the Literature

Opioid use disorder (OUD) is a chronic, relapsing, diagnosable condition. Those with OUD continue to use opioids despite negative consequences and feel compelled to continue use. Opioids are a group of drugs that when used incorrectly can suppress breathing, making individuals more susceptible to overdose death. In 2017, opioid-related overdoses claimed the lives of 2,110 Illinois residents, more than one and a half times the number of homicide deaths and double the number of car accident-related death.⁵ Of the 20,927 individuals in custody within the Illinois Department of Corrections on June 6, 2018, whose completed TCU-II drug screens were available, 2,562 (12.2 percent) self-reported opioid use as their most serious drug problem.⁶ A survey of state and federal prisoners showed while half met criteria for substance use disorders, fewer than 20 percent received treatment. Only 15 percent of state and 17 percent of federal prisoners reported having received drug treatment. After a stay in corrections, the risk of overdose is enhanced due to reduced tolerance after a period of abstinence.⁷ Research in Washington State found a relative risk of death from overdose within the first two weeks after release from prison was 12.7 times greater than similar individuals in the general population.⁸
Safe Withdrawal in Jails

Acute withdrawal symptoms due to substance dependence are common in jails that require detoxification upon admission. Opioid withdrawal symptoms start within four to six hours of last use of substance and increase in severity the longer the user is without drugs or proper treatment. Symptoms diminish within five to seven days. Symptoms begin with yawning, tearing in the eyes, and runny nose and advance to nausea, vomiting, diarrhea, body pains, and hypertension. Symptoms vary based on the quantity of use and how the drugs were administered into the body. While death from withdrawal is uncommon, the complications of withdrawal can cause death. This includes vomiting, which can cause asphyxiation, severe dehydration from sweating and diarrhea, and suicidal thoughts during severe withdrawal.

Forced abstinence of pregnant women dependent on opioids causes withdrawal of the mother and the fetus. Withdrawal may lead to neonatal abstinence syndrome, stunted growth, preterm labor, fetal convulsions, and possible death for the fetus. People with OUDs, including pregnant women, can prevent withdrawal—along with unwanted symptoms and dangerous complications—if jails offer and administer the agonist/partial agonist medications methadone or buprenorphine.

The United States Supreme Court ruled that withdrawal symptoms are a medical condition. Under the Eighth Amendment, correctional facilities, including jails, are required to provide proper medical care to detainees. Illinois jails are not required to have protocols to treat withdrawal symptoms, but the Illinois Administrative Code, Section 701.9 on medical and mental health care requires jails to offer medical services that treat substance dependence.

Medication-Assisted Treatment in Corrections

As is the case with many chronic health conditions, individuals with OUDs have a higher chance of success—retention in treatment and avoidance of continued illicit opioid use—when they receive medication and behavioral therapy, or medication-assisted treatment (MAT). The three FDA-approved prescription drug options for opioid use disorders are methadone, buprenorphine, and naltrexone (Table 1). Those taking daily prescribed methadone or buprenorphine often are forced to discontinue use upon jail detention, resulting in withdrawal, discomfort, and heightened vulnerability to relapse and overdose upon release due to reduced tolerance. It is recommended that medications be offered early, at the beginning stages of physical withdrawal. According to the World Health Organization, those in correctional facilities should be afforded the same care that is available outside of correctional facilities.
Table 1
FDA-Approved Medications for the Treatment of Opioid Use Disorders

<table>
<thead>
<tr>
<th>Methadone&lt;sup&gt;22&lt;/sup&gt;</th>
<th>Buprenorphine&lt;sup&gt;23&lt;/sup&gt;</th>
<th>Naltrexone&lt;sup&gt;24&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Full agonist.</td>
<td>• Partial agonist.</td>
<td>• Antagonist.</td>
</tr>
<tr>
<td>• Brand names: Methadose®, Diskets®, Dolophine®.</td>
<td>• Brand names: Subutex®, Suboxone®, Zubsolv®, Bunavail®, Butrans®, Buprenex®, Probuphine®.</td>
<td>• Brand name: Vivitrol®.</td>
</tr>
<tr>
<td>• Attaches to opioid receptor and mimics the effect of heroin or other opioids.</td>
<td>• Attaches to the opioid receptors, but only activates enough to suppress withdrawal and cravings.</td>
<td>• Completely binds to and blocks opioid receptors.</td>
</tr>
<tr>
<td>• Works as a long-acting opioid replacement for shorter-acting opioids that are typically misused (e.g. heroin, fentanyl), preventing withdrawal without resulting in a high.</td>
<td>• Once all opioid receptors are occupied, no additional effect occurs with opioid use; feels “normal” not “high” (ceiling effect).</td>
<td>• Blocks opioids from opioid receptors, so individuals cannot get “high.”</td>
</tr>
<tr>
<td>• Helps stabilize individuals who are opioid dependent.</td>
<td>• Expels, replaces, and blocks other opioids from opioid receptor sites.</td>
<td>• Requires 7 to 10 days free of opioid use to prevent precipitating withdrawal.</td>
</tr>
<tr>
<td>• Taken daily.</td>
<td>• Taken daily.</td>
<td>• Injectable lasts 28 days.</td>
</tr>
</tbody>
</table>

According to the American Society of Addiction Medicine, all correctional detainees and inmates, regardless of sentencing status, should continue using medications they have been prescribed for the treatment of OUD<sup>25</sup>. Inmates inducted on naltrexone must have been withdrawn and abstinent from opioids for seven to 10 days, but the other two medications do not require withdrawal.<sup>26</sup>

Some states have reduced opioid overdose death among people released from incarceration through jail-based MAT programs. These include California, Kentucky, Maryland, Massachusetts, New Jersey, New York, Ohio, Rhode Island, Texas, Utah, West Virginia; however, most offer only naltrexone (brand name Vivitrol®). Rhode Island offers all three medications and has since reported a 60 percent reduction in post-release opioid overdose deaths.<sup>27</sup>

In addition to medication, behavioral therapies can be offered to jail detainees. According to the U.S. Department of Health and Human Services’ (DHS) Substance Abuse and Mental Health Services Administration (SAMHSA), barriers to effective jail-based behavioral treatment programs include:

- Lack of funding for programs.
- Limited time individuals spend in the jail.
- Facility space limitations.
- Refusal of treatment providers to work in jails.
Overlapping concerns between substance abuse and criminal justice system. Substance abuse treatment focuses on rehabilitation and safety, while the justice system focuses on punishment.

Information-sharing complications between treatment providers and criminal justice staff.

**Naloxone Distribution in Corrections**

In a meta-analysis examining six studies, those with opioid use disorders are three to eight times more likely to overdose within two weeks of their release. An increase in the number of overdoses has been attributed to increased street access to fentanyl, a synthetic opioid 30 to 50 times more potent than heroin. Overdose from opioids are usually accidental, and most occur in the presence of other individuals.

Naloxone (brand name Narcan®) is an opioid antagonist that reverses effects of an opioid overdose and can be administered by minimally trained individuals. Despite its benefit, there continues to be a need for training on and use of naloxone for those being released from jail and prison. Training on proper use is important because by the time an individual experiences respiratory depression, it may be too far into the overdose to successfully reverse it. Jails across the country have begun to distribute naloxone. Rikers Island Jail, for instance, has distributed naloxone to friends and families of inmates during jail visits since 2014. Friend and family connections are important because a person cannot administer naloxone on themselves when experiencing an overdose.

A 2009 study found that 90 percent of a sample of criminal justice-involved opioid users were willing to participate in training on naloxone administration and overdose prevention, and research indicates that education and training can improve attitudes and knowledge about the value of naloxone. The Vera Institute of Justice, for instance, found that an overdose education and naloxone distribution program instituted in the New York correctional system increased respondents’ knowledge on how to help someone who is overdosing from an opioid. In a review of 19 studies of take home naloxone in corrections settings, research suggests training of inmates translates to use of naloxone after release. Less is known about its direct impact on opioid-related death rates. Research on naloxone programs post-jail or prison release has focused on knowledge of and beliefs about the program rather than determining how they impact mortality rates.

**Current Study**

**Methodology**

ICJIA researchers asked the Illinois Sheriff’s Association to send an online survey via email to its members—sheriffs and jail administrators—in April and May 2018. Researchers completed survey reminders by phone and email in June 2018. The survey was closed and the data downloaded for analysis on July 22, 2018.

The research study was approved by the Illinois Criminal Justice Information Authority’s Institutional Review Board. All respondents were required to review a consent form and agree to
participate in the study. The survey consisted of 57 questions, including six on withdrawal/detoxification, 47 on MAT, and four on naloxone. The survey was created using Qualtrics, online survey software. Many questions were derived from a similar national study of criminal justice practitioners, the Criminal Justice-Drug Abuse Treatment Studies (CJ-DATS). The data were analyzed using Microsoft Excel and SPSS statistical software.

A total of 40 responses were received, but four surveys were removed. Therefore, the final sample size was 36 of 92 Illinois jails or 39 percent. Researchers sought to gain input from one representative per county, so in the cases of multiple county surveys, the sheriff’s responses were kept in the sample and responses from other staff titles, such as lieutenant, were removed from the sample. Table 2 offers more detail on the final sample. Many of the responding counties were from jurisdictions with relatively high opioid overdose death rates. Counties represented in the sample accounted for 71 percent of opioid overdose deaths in 2017 according to the Illinois Department of Public Health.

One limitation of low response rates is that they can impact generalizability of the findings making results of this survey not representative of all jails in the state. While a 39 percent response rate is somewhat low, similar online surveys have yielded an average response rate of 10 to 15 percent. Therefore, the response rate for this survey was not uncommon for the method and target respondents.

### Table 2
Responding County Jails in Final Sample (N=36)

<table>
<thead>
<tr>
<th>Rurality</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly urban</td>
<td>22</td>
<td>61.1%</td>
</tr>
<tr>
<td>Partially rural</td>
<td>11</td>
<td>30.6%</td>
</tr>
<tr>
<td>Mostly rural</td>
<td>3</td>
<td>8.3%</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern</td>
<td>10</td>
<td>44.4%</td>
</tr>
<tr>
<td>Central</td>
<td>16</td>
<td>27.8%</td>
</tr>
<tr>
<td>Southern</td>
<td>10</td>
<td>27.8%</td>
</tr>
<tr>
<td>Title of person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>responding to survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheriff or Lieutenant</td>
<td>28</td>
<td>77.8%</td>
</tr>
<tr>
<td>Jail medical provider</td>
<td>1</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>19.4%</td>
</tr>
<tr>
<td>Percent of opioid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>overdoses in state</td>
<td>36</td>
<td>70.8%</td>
</tr>
<tr>
<td>Percent of jails in the state</td>
<td>36</td>
<td>39.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2010; Illinois Department of Public Health, 2018
Note: Totals may equal more than 100% due to rounding.

### Main Findings

Eighty-nine percent of responding jails reported a moderate to serious problem with opioid misuse in their jurisdiction (n=32) and 11 percent reported it was a slight problem (n=4). The following are findings from the survey of jails regarding withdrawal/medical detox, MAT, and naloxone.
**Opioid withdrawal and detox.** Seventy-eight percent of the jails reported having protocols for treating withdrawal symptoms (n=28) (*Figure 1*). Five jail administrators reported having no protocol for detainees experiencing withdrawal symptoms, and three responded “don’t know.” Respondents were asked to indicate any treatment provisions to individuals going through withdrawal from opioids or other substances. Jail administrators reported providing medications such as hydroxyzine (n=2), loperamide (n=2), over-the-counter medications such as acetaminophen and/or ibuprofen (n=2), and Gatorade (n=2) to treat symptoms.

Medical opioid detoxification consists of the provision of medical care to manage physical symptoms of withdrawal, and may involve administration of medication. Nearly 40 percent of jail administrators who responded to the survey reported offering medicines for opioid withdrawal (n=14). Specifically, they reported offering methadone (n=4), benzodiazepines (n=3), buprenorphine (n=3), and clonidine (n=2).

![Figure 1](source: ICJIA survey, 2018)

**Jail Protocols for Responding to Withdrawal and Medical Detoxification (N=36)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jail protocol in jail for responding to withdrawal</td>
<td>78%</td>
</tr>
<tr>
<td>Medical detox offered in jail for OUD</td>
<td>39%</td>
</tr>
</tbody>
</table>

Source: ICJIA survey, 2018
Note: Respondents could select either or both responses.

**Findings on medication-assisted treatment.** Twenty-two percent of the responding jail administrators indicated they offer MAT to detainees (n=8) (*Figure 2*). Three jails specifically mentioned offering methadone to pregnant women, which is the standard of care for that population. Methadone, as well as buprenorphine, have been shown to be safe and effective for women with OUD to reduce neonatal abstinence syndrome and other complications.
Of the three medications, naltrexone was the most commonly prescribed (n=5). Three jails reported having on-staff nurses, and two reported that outside treatment providers administer naloxone injections in the jail. All five jails connected individuals to a naltrexone provider prior to release.

All five jails offering naltrexone stated the medication was paid for with grant funding. The four jails offering methadone indicated the medication was paid for by the jail, (n=2), private insurance (n=1), or out of the pharmacy budget (n=1). Of the three jails offering buprenorphine, one reported the medication was paid by grant funds and by the jail.

Respondents were asked about protocols for pretrial detainees who enter jail while being prescribed the medications buprenorphine or methadone and go on to be sentenced to the Illinois Department of Corrections (IDOC). One respondent commented that individuals entering jail with a prescription to those medications have an addiction to them. Another noted that they do receive those medications while in jail custody because they are cost prohibitive. Finally, one respondent said that jail detainees are tapered off of those medications because if subsequently sentenced to prison, IDOC will not continue their use.

Figure 3 depicts the barriers to offering MAT in jails. Twenty-two percent of responding jail administrators said that overall, barriers to MAT existed to a moderate or great extent. Forty-two percent of respondents indicated that cost was the greatest barrier to offering MAT in their facilities. Others expressed concerns about legal liability due to the jail potentially contributing to diversion of the medication in the jail and potential overdose. Another barrier was the general lack of training on how to administer MAT medications and programs. A jail administrator also cited a lack of community providers, facility space, and on-site nursing or medical staff to provide care.
Eight respondents reported that it was likely or very likely that they would introduce MAT within their jails, and six reported that they would expand MAT in the next two years (Table 3). Jail administrators were asked to indicate if they would consider expanding or were open to offering specific MAT medications. Respondents were most open to and more apt to consider expanding naltrexone than the other two medications in their facilities.

<table>
<thead>
<tr>
<th>Medication</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderately or extremely open to offering MAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>methadone</td>
<td>6</td>
<td>16.7%</td>
</tr>
<tr>
<td>buprenorphine</td>
<td>8</td>
<td>22.1%</td>
</tr>
<tr>
<td>naltrexone</td>
<td>9</td>
<td>25.0%</td>
</tr>
<tr>
<td>May consider or definitely considering expanding MAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>methadone</td>
<td>3</td>
<td>8.3%</td>
</tr>
<tr>
<td>buprenorphine</td>
<td>5</td>
<td>13.8%</td>
</tr>
<tr>
<td>naltrexone</td>
<td>7</td>
<td>19.4%</td>
</tr>
<tr>
<td>Likely or very likely to introduce MAT</td>
<td>8</td>
<td>22.1%</td>
</tr>
<tr>
<td>Likely or very likely to expand MAT</td>
<td>6</td>
<td>16.7%</td>
</tr>
<tr>
<td>Interested or Extremely interested in training on MAT</td>
<td>8</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

Source: ICJIA survey, 2018
Note: Respondents were provided with 5-point Likert Scales.

**Findings on naloxone distribution.** Based on survey responses, 50 percent of the responding jails gave their correctional officers access to naloxone in the facility (n=18), and in six jails, correctional officers were required to carry naloxone (*Figure 4*). Twenty percent of responding jails reported they either offered naloxone to detainees at the time of their release or were planning to in the future. While no responding Illinois jails provided naloxone to family or friends of detainees, one facility reported that it plans to do so in the future.

**Figure 4**
Illinois Jails Offering Naloxone to Staff, Detainees, and Friends/Family (N=36)

Source: ICJIA survey, 2018

**Conclusion**
Survey findings offer insight into how jail administrators can take steps to improve the short- and long-term care of those detained with opioid use disorders. It is well-known that jails—broadly speaking and also more specifically those offering medical services and substance use disorder treatment—have limited resources and face security challenges. However, jails can assist detainees with opioid use dependence and disorders by managing withdrawal, offering medication-assisted and behavioral health treatment, and teaching and encouraging methods of overdose prevention. Researchers suggest following recommendations.
Ensure Safe Withdrawal from Opioids with Training and Best Practices

Of the 36 Illinois jails responding to the survey, five reported having no protocol for detainees experiencing withdrawal symptoms and seven reported offering no medical detoxification. However, the survey did not assess quality or sufficiency of the protocols in place. Four jail administrators reported offering methadone and three reported offering buprenorphine. The World Health Organization and the National Commission on Correctional Health Care (NCCHC) offer guidelines to best care for individuals suffering from withdrawal symptoms while incarcerated. In 2009, WHO developed clinical guidelines stating that detainees with mild opioid withdrawal should drink 2-3 liters of water per day and take vitamin B and vitamin C supplements, while inmates with moderate to severe withdrawals should be offered buprenorphine, methadone, or codeine phosphate and closely monitored.45

NCCHC recommends properly training staff to handle withdrawal symptoms. Correctional facilities should help staff recognize opioid withdrawal symptoms and understand the consequences when they are left untreated.46 It is also recommended that inmates at high risk for acute withdrawal are referred to a facility better suited to manage their needs.47 Inmates dealing with acute withdrawal should be monitored every half-hour to ensure normal respiration levels.48

Offer All Three FDA-approved Medications and Evidence-Based Treatment for Detainees with Opioid Use Disorders

Opioid use disorder treatment is an individualized process that may include FDA-approved medications prescribed by a physician. The United States is one of the only countries in which opioid agonist/partial agonist medications (buprenorphine and methadone) are not consistently offered in correctional settings despite evidence of their effectiveness and classification by the World Health Organization as essential medications. Only a small portion of Illinois jails responding to the survey (22 percent) indicated that they offer MAT to detainees, and most commonly they offered only naltrexone-based MAT. New research has found buprenorphine and methadone to be associated with reduction of opioid-related death as well as death from any cause, but naltrexone was not.49 In addition, research indicates that providing only injectable naltrexone in a correctional setting is not cost effective due to the high cost of the medication.50

Jails starting an opioid treatment program (OTP) using methadone must obtain certification from SAMHSA, per federal law. To become certified, the OTP first must be accredited by a federally approved body, such as NCCHC. NCCHC offers Standards for Opioid Treatment Programs in Correctional Facilities based on federal regulations focused on care and limitations in jails.51 Qualified physicians must apply for waivers to prescribe or dispense buprenorphine in correctional facilities.52

In addition to or in absence of medications, jails should offer behavioral therapy. ICJIA researchers developed a web-based continuum on evidence-informed practices for addressing SUDs and substance misuse to guide criminal justice system assessment, planning, and implementation efforts around SUD prevention and intervention. The continuum offers information on current evidence-based practices for jails and includes behavioral therapies, such as cognitive behavioral therapy (CBT) and therapeutic communities.53 As correctional systems implement MAT programs, sufficient access to treatment upon return to the community is
imperative. Continued treatment at the community level will help reduce recidivism, reduce relapse and overdose, and increase individuals’ quality of life.54

**Train on and Distribute Naloxone to Jail Detainees with Opioid Use Disorders and Their Friends and Families**

A majority of responding jails did not offer naloxone to detainees or their family members or friends at the time of their release. The low rate of distribution to friends and family is especially problematic considering that naloxone cannot be self-administered. Increasing the availability of naloxone to those who may be around someone who is overdosing on an opioid increases the chances of its life-saving benefits. Thus, jails in Illinois should work to increase naloxone distribution and training to detainees and their close friends or families.

Based on recommendations from the Vera Institute of Justice, facilities that decide to implement naloxone distribution programs should engage staff and create partnerships with community organizations.55 Additionally, facilities should create programs that encourage as much inmate and family/friend participation as possible to decrease future risk of overdose death.

Incarcerated individuals may be less likely to accept naloxone kits at the time of their release due to fear of future legal system involvement. The Vera Institute of Justice found that individuals in New York would not accept kits out of fear of mistreatment by the justice system.56 Further, uncertainty about protections under the Good Samaritan Law, which provides limited immunity from prosecution when seeking medical assistance for an overdose, reportedly made releasees fearful of taking the kits, as they were unsure if they would be protected after administering naloxone.57 In Illinois jails, those who train inmates on and distribute naloxone should include information on the state’s Good Samaritan Law.

In Illinois, the Lake County Health Department has a program in which they train on and distribute naloxone to inmates in their local jail.58 The program has increased knowledge on overdoses and empowered those within the community.59 Other Illinois counties can look to the Lake County Health Department as a reference for beginning their own training program.

---

This project was supported by Grant #16-DJ-BX-0083, awarded to the Illinois Criminal Justice Information Authority by the U.S. Department of Justice Office of Justice Programs’ Bureau of Justice Assistance. Points of view or opinions contained within this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

*Laura Brookes, Policy Director, TASC, contributed to this article*


6 J. Couglin, personal communication, June 8, 2018.


