

# The Evolving Medicolegal Precedent for Medications for Opioid Use Disorder in U.S. Jails and Prisons

Takeo Toyoshima, MD, Dale E. McNiel, PhD, Ariel Schonfeld, MD, and Renée Binder, MD

Medications for opioid use disorder, also known as medication-assisted treatment (MAT), are critical in the treatment of opioid use disorder. Historically, inmates with opioid use disorder in U.S. jails and prisons have had difficulty accessing these medications, particularly methadone and buprenorphine. A series of recent legal cases, however, have set an evolving precedent for prisoners' rights to medications for opioid use disorder during incarceration based on the Eighth Amendment and the Americans with Disabilities Act. In addition to reviewing these cases, this article evaluates the recent clinical and research landscape in which these cases arose and highlights the need for further study into the role of medications in reducing in-prison morbidity and mortality from opioid use disorder.

**J Am Acad Psychiatry Law 49:545–52, 2021. DOI:10.29158/JAAPL.200127-20**

**Key words:** opioid use disorder; addiction; medication assisted treatment; jail; prison; correctional psychiatry

The opioid epidemic is widespread in the United States, and those involved in the U.S. criminal justice system are disproportionately affected. Societal attitudes have shifted toward addressing opioid use disorder (OUD) as a disease that warrants treatment, uniquely situating jails and prisons as entry points into such lifesaving treatment. In this article we examine the state of OUD and medications for OUD (MOUDs) within the criminal justice system, and we highlight recent studies on corrections-based MOUD use to reduce postincarceration inmate mortality. We also examine recent federal district and appellate court cases that have either been settled or ruled in favor of providing MOUDs in corrections

based on Eighth Amendment and Americans with Disabilities Act (ADA) arguments. Finally, we focus on the potential for MOUD to reduce in-prison morbidity and mortality from opioid use as a prime subject for future clinical, legal, and research efforts.

## The Opioid Epidemic and MOUD

The opioid epidemic is an ongoing medical crisis that disproportionately affects the United States. According to the Centers for Disease Control and Prevention, approximately 130 Americans die each day from opioid overdose, with opioid overdose deaths claiming roughly 450,000 American lives between 1999 and 2018.<sup>1</sup> In 2018 alone, over 67,000 died from drug overdose, with 70 percent of those deaths involving opioids.<sup>1</sup> Life expectancy in the United States has declined for the first time since World War I and the 1918 influenza pandemic, and the opioid epidemic is considered a significant contributor to this decline.<sup>2</sup> This epidemic has consisted of three distinct waves: first, a rise in prescription opioid-related overdose deaths in the 1990s to late 2000s, then an increase in heroin-related overdose deaths, and most recently an increase in overdose

---

Published online August 2, 2021.

Dr. Toyoshima is Assistant Clinical Professor of Psychiatry, Department of Psychiatry and Behavioral Sciences, University of California San Francisco, San Francisco, CA. Dr. McNiel is Professor of Clinical Psychology, Department of Psychiatry and Behavioral Sciences, University of California San Francisco, San Francisco, CA. Dr. Schonfeld is in private practice in forensic and clinical psychiatry, San Francisco, CA. Dr. Binder is Professor of Psychiatry, Department of Psychiatry and Behavioral Sciences, University of California San Francisco, San Francisco, CA. Address correspondence to: Takeo Toyoshima, MD. E-mail: takeo.toyoshima@ucsf.edu.

Disclosures of financial or other potential conflicts of interest: None.

deaths related to fentanyl and other synthetic opioids.<sup>1</sup> This phenomenon is closely tied with the increased prevalence of OUD, a chronic, relapsing disease with strong genetic contributions and frequent comorbid medical and psychiatric disorders. The prevalence of OUD remains as high as two million individuals in the United States.<sup>3</sup>

MOUD are evidence-based interventions, consisting of methadone, buprenorphine, and extended-release injectable naltrexone. MOUD are considered integral to effective OUD treatment together with behavioral and other psychosocial interventions.<sup>4,5</sup> Of the options, methadone and buprenorphine maintenance (i.e., ongoing administration) are the most well-established MOUD options, and they work by binding the  $\mu$ -opioid receptor (fully with methadone, partially with buprenorphine) at sufficient affinities and receptor activation to mitigate opioid withdrawal symptoms, satisfy cravings, prevent return to use, and block the effects of illicit opioids when taken at sufficient dosages. Naltrexone blocks the  $\mu$ -opioid receptor to mitigate reinforcing effects of opioids, but a need for abstinence from opioids prior to initiation complicates treatment.<sup>4</sup> Individualized treatment and access to all medication options are recommended by organizations including the American Society of Addiction Medicine and the World Health Organization.<sup>6,7</sup>

There is a common misconception that agonist MOUD replace one addiction for another; however, OUD is defined by loss of control and the sequelae associated with opioid use, not by the frequency or amount of consumed opioids.<sup>8</sup> Clinical trials have demonstrated that MOUD help patients achieve abstinence from illicit opioids and reduce the complications that define OUD, such as occupational and relational problems, overdoses, infectious diseases, and criminal recidivism and reincarceration.<sup>4-6,9</sup> Further, there has recently been a trend toward decreasing barriers to treatment, with emphasis on harm reduction approaches, defined by a primary goal of mitigating morbidity and mortality rather than achieving abstinence.<sup>7</sup> Historically, a common approach to OUD treatment was a medically supervised withdrawal, often termed a detoxification, consisting of time-limited administration of methadone or other medications, without MOUD maintenance treatment. Detoxification alone is not recommended, however, because of its association with high rates of return

to use and overdose risk when compared with maintenance treatment.<sup>4,7</sup>

## **OUD in the U.S. Criminal Justice System**

With one in five inmates incarcerated for drug-related offenses, the prevalence of substance use disorders (SUDs), including OUD, in the criminal justice-involved population is markedly above that of the general population. Between 1996 and 2006, 84.8 percent of all inmates in federal and state prisons and local jails had a history of alcohol and illicit substance use, as defined by regular use, a medically diagnosed use disorder, or alcohol or illicit substance use involvement in the index offense. Using dependence criteria from the Diagnostic and Statistical Manual, Fourth Edition,<sup>10</sup> 64.5 percent of all inmates met SUD criteria.<sup>11</sup> More recent data from 2007 to 2009 showed similar results, with approximately 60 percent of jail and prison inmates having a diagnosable SUD, and just under one in five meeting OUD criteria.<sup>12</sup> In California state prisons, the prevalence of SUDs in the inmate population is similarly estimated at 70 to 80 percent, with approximately one in four of these individuals meeting OUD criteria.<sup>13</sup> The overrepresentation of SUDs in the criminal justice population is further evident when compared with rates in the general population. According to 2017 data from the Substance Abuse and Mental Health Services Administration (SAMHSA), 7.4 percent of the U.S. population 12 years of age or older meet criteria for a SUD (including alcohol use disorder), and 0.7 percent meet OUD criteria. In California, the rates were similar at 8.1 percent for any SUD and 0.6 percent for OUD.<sup>14</sup> According to a 2018 study, of those addicted to heroin in the past year, 42.5 percent had been involved in the criminal justice system in the past year, and 76.8 percent reported any criminal justice involvement.<sup>15</sup> Such statistics show that jails and prisons offer a prime opportunity to address the opioid epidemic and serve as entry points into treatment.

## **Barriers to MOUD in Correctional Settings**

Despite the high prevalence of SUDs and in particular OUD in U.S. jails and prisons, there are far fewer treatment options available in these settings than in the community. Less than 20 percent of inmates receive treatment.<sup>16</sup> Treatment is usually in

the form of peer support groups such as Alcoholics Anonymous and Narcotics Anonymous, with some access to more formal treatment such as individual and group therapy. The most common intervention offered is patient education.

While MOUD are accepted as the community standard of care and are well-validated by research, it is difficult for inmates to access MOUD within jails and prisons.<sup>17</sup> The use of medications for SUDs is frequently restricted to special populations such as pregnant women and those with severe medical and psychiatric comorbidities, including life-threatening forms of withdrawal and toxidromes that might be mitigated by such medications.<sup>18</sup> As a result, the duration of administration is often strictly limited, particularly with opioid agonists such as methadone or buprenorphine when used for withdrawal management. Due to restrictions on MOUD prescriptions, newly incarcerated inmates on community-prescribed MOUD are often forced to undergo withdrawal, leaving them primed for postincarceration return to drug use and overdose with a newly lowered tolerance.<sup>7,17</sup> Arguments against MOUD implementation have included a preference for “drug-free” detoxification, stigma toward agonist treatment, perceived difficulty of implementation, diversion risk, security and liability concerns, resources such as staff and finances, and a variety of laws, regulations, and policies, including 42 CFR Part 8, which governs the provision of agonist MOUD and accreditation of opioid treatment programs.<sup>5,17,19–22</sup> Such concerns, particularly the risk of diversion and security concerns, as well as the complexity of MOUD-related administrative and legislative hurdles, are beyond the scope of this article but warrant careful consideration in understanding correctional MOUD programs.

Today, of all 50 state prison systems, only Rhode Island’s and Vermont’s Departments of Corrections consistently offer all three forms of MOUD to inmates.<sup>23–25</sup> A 2009 survey of state Departments of Corrections, the Federal Bureau of Prisons, and the District of Columbia Prison indicated that only 55 percent of prisons offered methadone under any circumstance, and only 14 percent offered buprenorphine under any circumstance.<sup>19</sup> Of the prisons that offered methadone, half offered methadone solely for acute withdrawal, chronic pain, and treatment of OUD in pregnant women. In a separate 2012 study, 75 percent of queried prisons provided methadone to treat OUD in pregnant women, but only 25 percent continued

maintenance treatment for inmates already on MOUD, and only 8 percent allowed methadone initiation for those not already on this medication.<sup>20</sup> With regard to jails, there is significant variance on the basis of locality, with attitudes and policies related to MOUD varying widely even between facilities in neighboring counties. A limited number of jails (such as Rikers Island managed by New York City Health + Hospitals/Correctional Health Services and Franklin County Jail in Massachusetts) provide all three forms of MOUD.<sup>25</sup> Methadone was only available in 22 of 3,300 local jails in the United States.<sup>23</sup> Consequently, many jails and prisons require inmates to withdraw from all opioids, including prescribed MOUD. MOUD were available in less than half of drug courts (37.5%) and probation and parole agencies (17%).<sup>20</sup>

### MOUD to Reduce Postincarceration Deaths

With national attention on the opioid epidemic, there has been renewed attention and research on the overrepresentation of SUDs in the criminal justice setting and their associated morbidity and mortality. Recent epidemiologic studies have shown the toll of SUDs, in particular OUD, on the criminal justice population. In North Carolina, previously incarcerated individuals die from opioid overdose at rates 40 times higher than the general state population.<sup>26</sup> In Massachusetts, the rate of death from opioid overdose for former inmates is 120 times that of the general population.<sup>27</sup> Opioid overdoses account for roughly half of all deaths for persons released from incarceration in Massachusetts. In 2018, former inmates of Connecticut’s Department of Corrections accounted for 56 percent of state overdose deaths, a concerning trend as accidental drug overdoses in the state tripled between 2010 and 2018.<sup>28</sup> With 77 percent of former inmates relapsing to opioids within three months of release from incarceration, a large proportion of these overdose deaths occur in the immediate postincarceration period.<sup>29,30</sup> Further, people who are forced to discontinue MOUD upon incarceration are more frequently lost to follow up and fail to resume MOUD on release.<sup>29</sup>

These findings have led correctional and community stakeholders to more robustly address this postincarceration period. A recent growing body of research has demonstrated the importance of MOUD access in addressing this postincarceration mortality. Green *et al.* demonstrated a 60.5 percent reduction in opioid-

related postincarceration deaths just one year into piloting a prison-based MOUD program in Rhode Island.<sup>31</sup> In other studies, MOUD implementation in jails and prisons led to increased rates of postincarceration follow up with outpatient treatment, shorter intervals prior to accessing care, and reduced rates of reincarceration, overdose, and death.<sup>29</sup> Similar findings have been demonstrated in criminal justice settings in countries such as the United Kingdom, Canada, and Australia.<sup>29</sup>

Such data have buoyed governmental and organizational interest in increasing MOUD access in correctional settings. The 2017 Presidential Commission on Combating Drug Addiction and the Opioid Crisis recommended the National Institute on Corrections, the Bureau of Justice Assistance, SAMHSA, and other national, state, local, and tribal stakeholders increase MOUD access within the criminal justice system.<sup>32</sup> The federal government has reaffirmed its mission to increase MOUD access to incarcerated individuals as part of its 2019 National Drug Control Strategy.<sup>33</sup> The National Institute of Drug Abuse sponsored the Criminal Justice Drug Abuse Treatment Studies to improve practices in treating SUDs in justice-involved populations.<sup>34</sup>

Professional medical and correctional organizations have likewise weighed in on expanding SUD treatment including increased MOUD access. The American Academy of Addiction Psychiatry's policy statement advocates for increased SUD-related training for correctional health care staff and expansion of jail and prison formularies to include MOUD.<sup>35</sup> The American Correctional Association and the American Society of Addiction Medicine have co-authored a joint position statement addressed to correctional policy makers and health care professionals, recommending increased MOUD access, including prerelease MOUD initiation.<sup>36</sup> A recent position statement from the American Society of Addiction Medicine goes as far as recommending access to all FDA-approved MOUD as the standard of care during incarceration.<sup>37</sup> The National Commission on Correctional Health Care similarly published a position statement advocating for access to MOUD, including methadone and buprenorphine, in correctional facilities, as well as a joint publication with the National Sheriffs' Association on the best practices and guidelines for jail-based MOUD implementation.<sup>38,39</sup>

## Legal Precedent for MOUDs in Corrections

A series of recent legal cases reflect shifting judicial and societal attitudes toward OUD, MOUD access, and what constitutes adequate care for OUD in the criminal justice system. Historically, there have been many cases since *Estelle v. Gamble*<sup>40</sup> involving the wellbeing of prisoners and the criminal justice system's obligation to provide adequate health care, including *Plata v. Schwarzenegger*<sup>41</sup> and *Coleman v. Schwarzenegger*,<sup>42</sup> both of which have led to large-scale changes in how such treatment is provided in California state prisons. Plaintiffs in such cases have generally invoked legal principles, including the Eighth Amendment's "cruel and unusual punishment" clause, the Fourteenth Amendment's "equal protection" clause, Title II of the ADA, the Civil Rights Act of 1871, the Rehabilitation Act of 1973, and 42 U.S.C. § 1983. Through these cases, common law standards such as deliberate indifference and the need to provide reasonably adequate care have arisen.

Recent cases involving MOUD access during incarceration include *DiPierro v. Hurwitz*,<sup>43</sup> *Pesce v. Coppinger*,<sup>44</sup> *Smith v. Aroostook County*,<sup>45,46</sup> *Kortlever v. Whatcom County*,<sup>47</sup> *Smith v. Fitzpatrick*,<sup>48</sup> *Godsey v. Sawyer*,<sup>49</sup> and *Crews v. Sawyer*.<sup>50</sup> In all of these cases, the plaintiffs had an established diagnosis of OUD for which they had been treated with either methadone or buprenorphine maintenance, with evidence of clinical improvement. In all but *Kortlever v. Whatcom County* and *Crews v. Sawyer*, the plaintiffs filed suit before incarceration to obtain a temporary restraining order or preliminary injunction so they could continue receiving MOUD once incarcerated. In the class action suit of *Kortlever v. Whatcom County* and the case of *Crews v. Sawyer*, the plaintiffs had already been forced to discontinue MOUD upon incarceration and thus sought reinitiation of MOUD. The plaintiffs were all sentenced to incarceration in county jails, state prisons, or federal prisons without access to agonist MOUD options, with the exception of treatment of OUD in pregnant women.

The plaintiffs claimed violations of the Eighth Amendment, Title II of the ADA, and the Rehabilitation Act, or a combination of the above. They argued that they experienced cruel and unusual punishment when MOUD were withheld, and that they faced discrimination on the basis of their OUD diagnosis and absence of

pregnancy (given aforementioned policies in place accommodating MOUD access for pregnant inmates). The plaintiffs argued that MOUD were the standard of care in treating OUD, particularly with reference to methadone and buprenorphine, and an intervention that was clinically indicated and appropriate as determined by the plaintiffs' respective community treatment providers. The plaintiffs claimed that refusal of the jails and prisons to provide MOUD was deliberate indifference to the prisoners' medical needs based on their disability of OUD. The plaintiffs claimed that as a result of a lack of access to their usual MOUD, they faced irreparable harm including the pain and suffering of a forced withdrawal and an elevated risk of postincarceration relapse, overdose, and death. Defendants argued that medically managed withdrawal, counseling, and switching to naltrexone were appropriate forms of OUD treatment, and that correctional facilities were entitled to deference in their choice of which treatments to offer. Additional arguments included safety, security, and logistical concerns in furnishing agonist MOUD. In response to ADA claims, defendants argued that differences in opinion on the type of treatment to furnish was not discrimination.

Judges ruled in favor of plaintiffs in *Pesce v. Coppinger*<sup>44</sup> and *Smith v. Aroostook County*,<sup>45,46</sup> the latter in both the federal district court and the First Circuit Court of Appeals. Preliminary injunctions were granted on the basis of both ADA and the Eighth Amendment in *Pesce*, and on the basis of ADA alone in *Smith*. The judges recognized the severity of the plaintiffs' OUD diagnosis, their history of treatment failures without the specific requested MOUD, and the risk of irreparable harm including relapse, overdose, and death without access to MOUD during incarceration. Further, they rejected defendants' arguments that alternate MOUD use and detoxification alone were sufficient forms of treatment. In balancing public interest and harm, the judges accorded deference to prison administrators and recognized the defendants' claim of potential security concerns in furnishing MOUD. Both opinions found that the balance tipped in favor of plaintiffs, however, noting that public interest favors plaintiffs' remaining in recovery from OUD. Further, in *Smith*, the judge also cited a time when MOUD treatment was safely furnished to a pregnant woman without security incidents. In these two

cases, the correctional facilities were ordered to prescribe MOUD to plaintiffs for the entirety of their incarceration.

In the other cases, the parties settled, agreeing to provide MOUD to the plaintiffs while incarcerated. In *Crews v. Sawyer*,<sup>50</sup> the judge's opinion, which granted the defendant's motion to dismiss the suit after a settlement was reached, included reference to the First Step Act of 2018.<sup>51</sup> This law directs the Federal Bureau of Prisons (BOP) to develop and implement "plans to expand access to evidence-based treatment for heroin and opioid abuse for prisoners, including access to medication-assisted treatment [MAT] in appropriate cases" (Ref. 51, § 407(a)). A subsequent 2019 Bureau of Prisons guidance was also cited, which instructed the bureau to expand "its MAT program to include all FDA-approved MAT medications currently available in the United States" (Ref. 50, p 3), and, if clinically appropriate, to continue MOUDs for inmates who enter the Bureau of Prisons on such medications.

These case outcomes reflect evolving societal and legal standards for what constitutes appropriate medical care for OUD.<sup>52</sup> At this time, no cases have been identified that argued for the right to *de novo* initiation of MOUD within custody settings; however, it is likely that this will be a burgeoning area of litigation in the near future given substance use-related risks that prisoners face while incarcerated.

### Overdose Deaths While Incarcerated

Unlike the postincarceration period, the morbidity and mortality from substance use during incarceration is less studied and less understood, despite the well-known ease of procurement and the frequent use of alcohol and other illicit substances (including diverted medications) within jails and prisons.<sup>5,22,53</sup> The difficulty in conducting such research is compounded by prisoners' being a "vulnerable population" as defined under 45 CFR 46. As a result, there are limited data on prisoners' rates of substance use and associated complications during incarceration. The available data, however, suggest that prisoners face serious risk for SUD-related complications including relapse, overdose, and death while incarcerated.

According to Bureau of Justice Statistics' Death in Custody Reporting Program data from 2001 to 2014, there were 45,640 state prisoner deaths and 5,145 federal prisoner deaths.<sup>54</sup> Of these, "drug/alcohol intoxication" accounted for 595 deaths despite

the theoretical inability to access alcohol and drugs while incarcerated. These deaths were equivalent to 1 percent of total state prisoner deaths at a mortality rate of three deaths per 100,000 persons. Statistics for federal prisoner overdose rates specifically due to opioids were unavailable. The overdose rates showed considerable discrepancy between states. In the studied period, California state prison inmates died of drug or alcohol overdose at a rate of 9 deaths per 100,000 prisoners, three times the aforementioned national average in-prison overdose rate. Several other states had similarly high rates, including Arizona (8 per 100,000), Indiana (8 per 100,000), Maryland (15 per 100,000), New Hampshire (11 per 100,000), Rhode Island (11 per 100,000), and Vermont (11 per 100,000).<sup>54</sup> In comparison, the general population's drug overdose death rates in 2014 were as follows: 11.1 per 100,000 in California, 12.6 per 100,000 in Arizona, 18.2 per 100,000 in Indiana, 17.4 per 100,000 in Maryland, 26.2 per 100,000 in New Hampshire, 23.4 per 100,000 in Rhode Island, and 13.9 per 100,000 in Vermont.<sup>55</sup> A major limitation in the available data are that the study period did not cover 2014 to the present when deaths related to synthetic opioid (i.e., fentanyl) dramatically escalated.<sup>1</sup> Another limitation is that overdose deaths rates after robust prison MOUD program implementation in Rhode Island (2016–2017) and Vermont (2018) were unavailable, whereas such data may shed light on the effect of MOUD programs on in-prison overdose rates.

The California Correctional Health Care System publishes an annual inmate death review, with more current data and which offers the potential for further insight into substance-related morbidity and mortality in its state prisons. In 2006, drug overdose accounted for 19 (4.5%) of 426 inmate deaths in California Department of Corrections and Rehabilitation (CDCR). By 2018, this number increased to 62 drug-overdose deaths (13.7% of all inmate deaths), with a vast majority involving heroin, fentanyl, and other illicit opioids.<sup>56</sup> This was a nearly three-fold increase compared with the 2006 rate, bringing the annual mortality rate to 48.1 deaths per 100,000 persons, four times the states' 2018 civilian rate of 12.8 deaths per 100,000 persons.<sup>55</sup> Overdose deaths became the third most common cause of death in CDCR, exceeding suicides, homicides, liver disease, and infectious disease. Furthermore, there were large increases in proxies for SUD-related morbidity. From 2014 to

2017, CDCR experienced a 54 percent increase in emergency department visits and hospitalizations related to drug overdoses, with this upward trend continuing into 2018.<sup>13,56</sup> Such trends led CDCR to pilot a MOUD program starting in 2016, with plans for expansion (as the Integrated Substance Use Disorder Treatment program) in 2020 to address its higher-than-average overdose rate.<sup>57</sup>

## MOUD to Curb In-Prison Deaths

Given the available data on the epidemiology of SUD- and OUD-related morbidity and mortality in corrections, the effect of MOUD on the morbidity and mortality of incarcerated inmates is an area well-suited for study. Despite an increasing body of evidence for MOUD to reduce postincarceration mortality, only one study has examined the effect of MOUD on in-prison mortality. Larney *et al.* reviewed data from 16,715 prison inmates with OUD in Australia between 2000 and 2012 in a retrospective cohort study, comparing use and non-use of MOUD.<sup>58</sup> Treatment with MOUD was associated with a 74 percent reduction in all-cause mortality regardless of factors such as gender, race, age, incarceration history, and types of offenses. The reduction in all-cause mortality increased to 94 percent when they specifically examined the first four weeks of incarceration. Similarly strong reductions were seen for unnatural deaths, suicides, and drug-induced deaths.

Several studies from Australia, Iran, Puerto Rico, and Canada have examined the effect of MOUD access on in-prison substance use and risky behaviors. Though some concerns exist about study design, available studies showed a consistent reduction in rates of heroin use (62–91%), injection drug use (55–75%), and needle sharing (47–73%), all of which are significant contributors to transmission of infectious diseases such as hepatitis C virus, HIV, and skin and soft tissue infections.<sup>59</sup> Such results are convincing evidence that further studies addressing SUD-related morbidity and mortality during incarceration in U.S. jails and prisons should be undertaken, particularly given their likely clinical, legislative, and judicial impacts.

## Conclusion and Future Directions

Despite concerted efforts at local, state, and national levels, the opioid epidemic continues to

claim many lives. Given the proportion of OUD patients who become justice-involved, the criminal justice system can play a significant role in curbing this epidemic. With evolving clinical evidence and a national dialogue, a shift in judicial and societal standards of what constitutes appropriate medical care for OUD appears to be underway. Evolving case law and legislative actions are affecting the provision of correctional SUD treatment. A question is whether drug-related in-prison morbidity and mortality will become a focus for future research, and how such research will affect correctional SUD treatment and the possibility for lawsuits petitioning for *de novo* initiation of MOUD within jails and prisons. Until this time, it is the responsibility of physicians and health care professionals to be familiar with the evolving body of research, provide evidence-based treatment, and educate the public and other stakeholders on the parameters of appropriate medical care for OUD and other SUDs.

## References

- Centers for Disease Control and Prevention. Opioid overdose [Internet]. Available from: <https://www.cdc.gov/drugoverdose/epidemic/index.html>. Accessed July 26, 2020
- Dyer O. US life expectancy falls for third year in a row. *BMJ*. 2018 Dec; 363:k5118
- Bose J, Hedden SL, Lipari RN, Park-Lee E. Key substance use and mental health indicators in the United States: results from the 2018 National Survey on Drug Use and Health. HHS Publication No. PEP19-5068, NSDUH Series H-54. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration [Internet]; 2019. Available from: <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHHFR2017/NSDUHHFR2017.pdf>. Accessed May 29, 2020
- Kan D, Zweben J, Stine SM, *et al*. Pharmacological and psychosocial treatment for opioid use disorder. In Miller SC, Fiellin DA, Rosenthal RN, Saitz R, editors. *The ASAM Principles of Addiction Medicine*. Philadelphia: Wolters Kluwer; 2019. p. 805–828
- American Academy of Psychiatry and the Law. AAPL practice resource for prescribing in corrections. *J Am Acad Psychiatry Law*. 2018 Jun; 46(2 Suppl): S2–S50
- World Health Organization. Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence [Internet]; 2009. Available from: [https://www.who.int/substance\\_abuse/publications/opioid\\_dependence\\_guidelines.pdf](https://www.who.int/substance_abuse/publications/opioid_dependence_guidelines.pdf). Accessed July 26, 2020
- American Society of Addiction Medicine. The ASAM national practice guideline for the treatment of opioid use disorder: 2020 focused update [Internet]; 2020. Available from: <https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf>. Accessed July 26, 2020
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition. Arlington, VA: American Psychiatric Association; 2013
- Ma J, Bao Y, Wang R, *et al*. Effects of medication-assisted treatment on mortality among opioids users: A systematic review and meta-analysis. *Mol Psychiatry*. 2019 Dec; 24(12):1868–1883
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association; 2000
- Center on Addiction. Behind bars II: Substance abuse and America's prison population [Internet]; 2010. Available from: <https://www.centeronaddiction.org/addiction-research/reports/behind-bars-ii-substance-abuse-and-america%E2%80%99s-prison-population>. Accessed May 29, 2020
- Bronson J, Stroop J, Zimmer S, Berzofsky M. Drug Use, Dependence, and Abuse Among State Prisoners and Jail Inmates, 2007-2009. Bureau of Justice Statistics; NCJ 250546; 2017
- Kelso JC. Treatment to reduce the burden of disease and deaths from opioid use disorder [Internet]; 2018. Available from: <https://cchcs.ca.gov/wp-content/uploads/sites/60/Reports/Drug-Treatment-Program.pdf>. Accessed January 31, 2020
- Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer: California, Volume 5: Indicators as measured through the 2017 National Survey on Drug Use and Health and the National Survey of Substance Abuse Treatment Services. HHS Publication No. SMA-19-Baro-17-CA. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2019
- Winkelman TN, Chang VW, Binswanger IA. Health, polysubstance use, and criminal justice involvement among adults with varying levels of opioid use. *JAMA Netw Open*. 2018 Jul; 1(3):e180558
- Chandler RK, Fletcher BW, Volkow ND. Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *JAMA*. 2009 Jan; 301(2):183–190
- Farahmand P, Modesto-Lowe V, Chaplin MM. Prescribing opioid replacement therapy in U.S. correctional settings. *J Am Acad Psychiatry Law*. 2017 Dec; 45(4):472–477
- Karan LD. Treatment of substance use disorders during incarceration. In Miller SC, Fiellin DA, Rosenthal RN, Saitz R, editors. *The ASAM Principles of Addiction Medicine*. Philadelphia: Wolters Kluwer; 2019, p. 1775–82
- Nunn A, Zaller N, Dickman S, *et al*. Methadone and buprenorphine prescribing and referral practices in US prison systems: Results from a nationwide survey. *Drug Alcohol Depend*. 2009 Nov; 105(1-2):83–88
- Friedmann PD, Hoskinson Jr, D, Gordon M, *et al*. Medication-assisted treatment in criminal justice agencies affiliated with the criminal justice-drug abuse treatment studies (CJ-DATS): availability, barriers & intentions. *Subst Abus*. 2012; 33(1):9–18
- Belenko S, Hiller M, Hamilton L. Treating substance use disorders in the criminal justice system. *Curr Psychiatry Rep*. 2013 Nov; 15(11):414
- McKee J, Penn JV, Koranek A. Psychoactive medication misadventuring in correctional health care. *J Correct Health Care*. 2014 Jul; 20(3):249–260
- Lopez G. How America's prisons are fueling the opioid epidemic [Internet] *Vox*; 2018. Available from: <https://www.vox.com/policy-and-politics/2018/3/13/17020002/prison-opioid-epidemic-medications-addiction>. Accessed January 30, 2020
- Prescription Drug Abuse Policy System. Medication Assisted Treatment in State Correctional Facilities [Internet]; 2019. Available from: <http://www.pdaps.org/datasets/medication-assisted-treatment-in-correctional-facilities>. Accessed January 30, 2020
- Mace S, Siegler A, Wu KC, *et al*. Medication-assisted treatment for opioid use disorder in jails and prisons: A planning & implementation toolkit [Internet] *Vital Strategies*. Available from: <https://www.vitalstrategies.org/wp-content/uploads/2020/01/>

## Evolving Precedent for Opioid Use Medications in U.S Prisons

- Medication-Assisted-Treatment-for-Opioid-Use-Disorder-in-Jails-and-Prisons.pdf. Accessed July 23, 2020
26. Ranapurwala SI, Shanahan ME, Alexandridis AA, *et al.* Opioid overdose mortality among former North Carolina inmates: 2000–2015. *Am J Public Health.* 2018 Sep; 108(9):1207–1213
  27. Massachusetts Department of Public Health. An assessment of fatal and nonfatal opioid overdoses in Massachusetts (2011–2015) [Internet]; 2017. Available from: <https://www.mass.gov/files/documents/2017/08/31/legislative-report-chapter-55-aug-2017.pdf>. Accessed January 11, 2020
  28. Connecticut Office of Policy and Management, Criminal Justice Policy and Planning Division: Research Unit Update [Internet]; 2019. Available from: [https://portal.ct.gov/-/media/OPM/CJPPD/CjCjpac/CJPAC-Presentations-Folder/2019-Presentations/Presentation\\_Kyle\\_CJPAC-OCT-2019.pdf](https://portal.ct.gov/-/media/OPM/CJPPD/CjCjpac/CJPAC-Presentations-Folder/2019-Presentations/Presentation_Kyle_CJPAC-OCT-2019.pdf). Accessed January 2, 2020
  29. Malta M, Varatharajan T, Russell C, *et al.* Opioid-related treatment, interventions, and outcomes among incarcerated persons: A systematic review. *PLoS Med.* 2019 Dec; 16(12): e1003002
  30. Kinlock TW, Gordon MS, Schwartz RP, O'Grady KE. A study of methadone maintenance for male prisoners: 3-month postrelease outcomes. *Crim Just & Behav.* 2008; 35(1):34–47
  31. Green TC, Clarke J, Brinkley-Rubinstein L, *et al.* Postincarceration fatal overdoses after implementing medications for addiction treatment in a statewide correctional system. *JAMA Psychiatry.* 2018 Apr; 75(4): 405–407
  32. The President's Commission on Combating Drug Addiction and the Opioid Crisis [Internet]; 2017. Available from: [https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final\\_Report\\_Draft\\_11-1-2017.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Final_Report_Draft_11-1-2017.pdf). Accessed January 11, 2020
  33. Office of National Drug Control Policy. National Drug Control Strategy [Internet]; 2019. Available from: <https://www.whitehouse.gov/wp-content/uploads/2019/01/NDCS-Final.pdf>. Accessed July 24, 2020.
  34. National Institute on Drug Abuse. Justice System Research Initiatives [Internet]. Available from: <https://www.drugabuse.gov/research/nida-research-programs-activities/criminal-justice-research-initiatives>. Accessed January 31, 2020
  35. American Academy of Addiction Psychiatry. Criminal Justice System and Substance Use Disorder Treatment Policy [Internet]. Available from: [https://www.aaap.org/wp-content/uploads/2018/07/AAAP-FINAL-Criminal-Justice-System-and-SUD-Treatment-Policy-HC\\_rr.pdf](https://www.aaap.org/wp-content/uploads/2018/07/AAAP-FINAL-Criminal-Justice-System-and-SUD-Treatment-Policy-HC_rr.pdf). Accessed January 1, 2020
  36. American Correctional Association and American Society of Addiction Medicine. Joint Public Correctional Policy on the Treatment of Opioid Use Disorders for Justice Involved Individuals [Internet]; 2018. Available from: [https://www.aaap.org/wp-content/uploads/2018/07/AAAP-FINAL-Criminal-Justice-System-and-SUD-Treatment-Policy-HC\\_rr.pdf](https://www.aaap.org/wp-content/uploads/2018/07/AAAP-FINAL-Criminal-Justice-System-and-SUD-Treatment-Policy-HC_rr.pdf). Accessed January 1, 2020
  37. American Society of Addiction Medicine. Public Policy Statement on Treatment of Opioid Use Disorder in Correctional Settings [Internet]; 2020. Available from: <https://www.asam.org/docs/default-source/public-policy-statements/2020-statement-on-treatment-of-oud-in-correctional-settings.pdf>. Accessed July 24, 2020
  38. National Commission on Correctional Health Care (NCCHC). Position Statement on Substance Use Disorder Treatment for Adults and Adolescents [Internet]; 2016. Available from: <http://www.ncchc.org/filebin/Positions/SubstanceUse-Disorder-Treatment-2016.pdf>. Accessed July 24, 2020
  39. National Sheriff's Association and National Commission on Correctional Healthcare. Jail-Based Medication-Assisted Treatment: Promising Practices, Guidelines, and Resources for the Field [Internet]; 2018. Available from: <https://www.sheriffs.org/publications/Jail-Based-MAT-PPG.pdf>. Accessed November 4, 2019
  40. *Estelle v. Gamble*, 429 U.S. 97 (1976)
  41. *Plata v. Schwarzenegger*, 603 F.3d 1088 (9th Cir. 2010)
  42. *Coleman v. Schwarzenegger*, 2009 U.S. Dist. LEXIS 88280 (E.D. Cal. 2009)
  43. Marton A, de la Gueronniere G. Recent Court Actions Impacting the Substance Use Disorder Field. Legal Action Center [Internet]; 2019. Available from: <https://nasadad.org/wp-content/uploads/2019/06/6.6.19-Recent-Court-Actions-Impacting-SUD-Field.pdf>. Accessed November 4, 2019
  44. *Pesce v. Coppinger*, 355 F. Supp. 3d 35 (D. Mass. 2018)
  45. *Smith v. Aroostook County*, 922 F.3d 41 (1st Cir. 2019)
  46. *Smith v. Aroostook County*, 376 F. Supp. 3d 146 (D. Me. 2019)
  47. *Kortlever v. Whatcom County*, No. 2:2018cv00823 (W.D. Wash. 2019)
  48. *Smith v. Fitzpatrick*, 2018 U.S. Dist. LEXIS 168950 (D. Me. 2018)
  49. *Godsey v. Sawyer*, 2020 U.S. Dist. LEXIS 80878 (W. D. Wash. 2020)
  50. *Crews v. Sawyer*, 2020 U.S. Dist. LEXIS 55666 (D. Kan. 2020)
  51. First Step Act, H.R.5682, 115th Cong. (2018) [Internet]. Available from: <https://www.congress.gov/bill/115th-congress/house-bill/5682/text>. Accessed December 7, 2020
  52. Linden M, Marullo S, Bone C, *et al.* Prisoners as patients: The opioid epidemic, medication-assisted treatment, and the eighth amendment. *J Law Med & Ethics.* 2018 Jun; 46(2):252–267
  53. Russo J, Woods D, Shaffer JS, Jackson BA. Caring for Those in Custody: Identifying High-Priority Needs to Reduce Mortality in Correctional Facilities, RAND Corporation [Internet]; 2017. Available from: [https://www.rand.org/pubs/research\\_reports/RR1967.html](https://www.rand.org/pubs/research_reports/RR1967.html). Accessed January 3, 2020
  54. Noonan ME. Mortality in State Prisons, 2001–2014. Bureau of Justice Statistics: NCJ 250150; 2016
  55. Centers for Disease Control and Prevention. Drug Overdose Mortality by State [Internet]. Available from: [https://www.cdc.gov/nchs/pressroom/sosmap/drug\\_poisoning\\_mortality/drug\\_poisoning.htm](https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm). Accessed January 31, 2020
  56. Imai K. Analysis of 2018 Inmate Death Reviews in the California Correctional Healthcare System [Internet]; 2018. Available from: <https://cchcs.ca.gov/reports/>. Accessed January 31, 2020
  57. California Department of Corrections and Rehabilitation. CDCR and CCHCS Unveil Expanded Priorities Through Renewed Mission and Vision Statements [Internet]; 2020. Available from: <https://www.cdcr.ca.gov/news/2020/01/08/cdcr-and-cchcs-unveil-expanded-priorities-through-renewed-mission-and-vision-statements/>. Accessed July 26, 2020
  58. Larney S, Gisev N, Farrell M, *et al.* Opioid substitution therapy as a strategy to reduce deaths in prison retrospective cohort study. *BMJ Open.* 2014 Apr; 4(4):e004666
  59. Larney S. Does opioid substitution treatment in prisons reduce injecting-related HIV risk behaviours? A systematic review. *Addiction.* 2010 Feb; 105(2):216–223