A Public Health and Safety Approach to Opioid Addiction and Overdose

We are the Drug Policy Alliance.

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BACKGROUND ON INCREASING RATES OF OPIOID ADDICTION AND OVERDOSE

In 2015 (the most recent year for which complete data are available), drug overdoses accounted for over 52,000 U.S. deaths.[1] Provisional data for 2016 put the number of overdose deaths at over 64,000—a staggering 22 percent increase from the year before.[2] From 2000 to 2015 more than half a million people died from drug overdoses.[3] The drug overdose death rate increased significantly from 12.3 per 100,000 people in 2010 to 16.3 in 2015.[4] Opioids—prescription and illicit—are the main drivers of increases in drug overdose deaths over the past 15 years. Opioids are a class of drugs that include the illicit drug heroin as well as the legal prescription pain medications oxycodone (OxyContin™), hydrocodone (Vicodin™), codeine, morphine and others.[5] Opioids were involved in more than 33,000 deaths in 2015, accounting for six out of every ten fatal overdoses, and representing over a 200% increase since 2000.[6] [7]

Sales, substance abuse treatment admissions, and overdose death rates related to prescription opioids have increased simultaneously since 1999.[8] Moreover, from 1999 to 2011, consumption of hydrocodone more than doubled and consumption of oxycodone increased by nearly 500%.[9] In 2014, almost two million Americans misused or were dependent on prescription opioids.[10] In 2015, more than 15,000 people died from overdoses involving prescription opioids, quadrupling the 1999 rate.[11]

As state and federal lawmakers and law enforcement officials attempted to restrict access to prescription opioids, many opioid-dependent people transitioned to using heroin.[12] Among new people who use heroin, approximately three out of four report having misused prescription opioids prior to using heroin. Ninety-four percent of opioid dependent individuals who switched from prescription opioids to heroin reported doing so because prescription opioids "were far more expensive and harder to obtain."[13] Beginning in 2010, heroin overdose fatalities began increasing rapidly across the country while fatal overdoses involving prescription opioids began to level off and even declined slightly between 2011 and 2012.[14] Between just 2010 and 2015, the rate of heroin-related overdose deaths more than quadrupled.[15] From 2014 to 2015 alone, heroin overdose death rates increased by 20.6%, with nearly 13,000 people dying in 2015.[16] It is important to note, though, that 77% of prescription opioid overdose deaths and 67% of heroin overdose deaths are the result of mixing opioids with other drugs or alcohol.[17]

The most recent increases in opioid overdose deaths are attributed to illicitly manufactured fentanyl. While pharmaceutical fentanyl is a synthetic opioid approved for treating severe pain,[18] illicitly manufactured fentanyl is often added to heroin to cut costs while increasing potency.[19] The number of overdose deaths involving synthetic opioids, excluding methadone but including fentanyl, increased by 72% from 2014 to 2015.[20] Roughly 9,500 people died from overdoses involving synthetic opioids other than methadone in 2015.[21] Provisional data from 2016 indicates that drug deaths involving fentanyl more than doubled from 2015 to 2016.[22] Along with other synthetic opioids (other than methadone), fentanyl overdoses resulted in 20,145 deaths last year, significantly above the 15,446 attributed to heroin or the 14,427 attributed to opioid pills alone.[23]

INADEQUACY OF CURRENT RESPONSES

Whereas past opioid crises were seen primarily in terms of low-income African Americans developing an addiction to heroin, the current epidemic is perceived as disproportionately affecting white, middle class people who misuse pharmaceutical opioids.[24] Moreover, some of the greatest increases in heroin use have occurred in demographic groups with historically low rates: women, the privately insured, and people with higher incomes.[25]

The result, the *New York Times* has noted, is a "gentler drug war."[26] Some Republican legislators who long championed punitive drug war policies, for example, now propose more humane responses. There has been a renewed emphasis on treatment, expanded access to the overdose antidote naloxone, the passage of Good Samaritan laws that offer protection to those calling for help during an overdose, and, recently, serious discussions of previously-taboo harm reduction interventions, such as supervised consumption services. Nonetheless, drug war strategies persist. Despite media attention elsewhere, use of the criminal justice system continues to dominate local, state, and federal responses to increasing rates of opioid use and overdose.

The Office of National Drug Control Policy has promoted prescription drug monitoring programs and coordinated federal-state crackdowns on pain physicians, patients, and illicit sellers.[27] The Drug Enforcement Administration (DEA) has aggressively investigated and prosecuted pain physicians for prescribing practices viewed as outside the scope of legitimate medical practice.[28] The Obama administration prioritized "law enforcement efforts to decrease pill mills, drug trafficking and doctor shopping" beginning in 2011.[29] States have mirrored the federal response to combatting prescription opioid misuse. Unsurprisingly, these responses have been wholly ineffective at reducing rates of prescription opioid use or overdose.

Moreover, as people dependent on opioids transition to the illicit heroin market, they are met with the same "arrest and incarcerate" policies that have been widely recognized as ineffective at reducing drug use, causing high rates of relapse, recidivism and re-incarceration.[30] Indeed, the criminalization of drug use is a major driver of incarceration in the United States. Each year, U.S. law enforcement makes nearly 1.5 million drug arrests – more arrests than for all violent crimes combined. The overwhelming majority—more than 80%—are for possession only and involve no violent offense.[31] In 2015, nearly 40% of drug arrests (more than 570,000 people) were for marijuana possession, and 45% (more than 674,000 people) were for possession of drugs other than marijuana.[32] Just 16% of all drug arrests were for sale or manufacture of any drug.[33] Clearly, the drug war lumbers on notwithstanding widespread disillusionment with its persistent failures at reducing problematic drug use and protecting public health and safety. President Trump and Attorney General Jeff Sessions have ratcheted it up even further, including ramping up raids on physicians providing opioid agonist treatment, reviving ineffective and cruel mandatory minimum sentences, and even encouraging federal prosecutors to pursue the death penalty in certain drug-related offenses.[34]

Taking an approach focused on punishment in the face of the current crisis is misguided and further harms individuals and communities already struggling with opioid addiction. Indeed, criminalization has usurped attention to, and resources for, harm reduction and effective drug treatment services. Only 12% of opioid dependent individuals receive methadone – one of the most effective treatments for opioid use disorder.[35] A staggering 30 states in the country provide either no access to syringe exchange programs or provide limited access in only one or two cities in the entire state.[36] Though the importance of naloxone, the opioid overdose antidote, has received widespread national attention, the vast majority of overdose prevention programs receive no federal or state funding and are unable to provide the amount of naloxone required to adequately serve their clients. Because public health interventions are often not in place and remain vastly inaccessible, the opioid epidemic remains unchecked. We must now focus our attention on formulating and implementing policies that effectively mitigate the risks and negative consequences associated with opioid use, addiction, and overdose. And, we must make sure that they are applied equally to all communities.

Finally, our response must be tempered with the knowledge that the vast majority of people who have ever used opioids – whether prescription medications or heroin – never develop problematic use. The National Institute on Drug Abuse estimates that 23 percent of individuals who use heroin become dependent on it.[37] The Substance

Abuse and Mental Health Services Administration recently published the results of the 2015 National Survey on Drug Use and Health, which found that over 87 percent of people who used prescription opioid pain relievers in the past year did not misuse them.[38] Thus, while we need to ensure that those with opioid use disorder and those who are at risk of overdose receive the effective treatment and services they need to mitigate the harms associated with their drug use, we must not widen the net and criminalize legitimate medical use of opioids, overstate the potential dangers of prescription opioid use and reduce access to needed pain medications, or stigmatize the people who use them.

A COMPREHENSIVE OPIOID ADDICTION AND OVERDOSE RESPONSE PLAN MUST INCREASE ACCESS TO EFFECTIVE TREATMENT, REDUCE HARMS, PREVENT FUTURE OPIOID MISUSE, AND DECREASE THE ROLE OF CRIMINALIZATION

In the sections that follow, DPA outlines a robust response plan focused on providing access to effective treatment, harm reduction, and prevention services and reducing the role of criminalization to optimally address increasing rates of opioid addiction, overdose, and other negative consequences stemming from opioid use. Opioid use disorder is a complex issue, and there is no silver bullet for fixing the problem. Rather, a multifaceted, comprehensive approach rooted in science is needed. In taking some or all or the steps delineated in the plan, local, state, and federal policymakers can act to produce healthier, safer outcomes while avoiding failed strategies that drive people away from care and treatment and exacerbate racial disparities. This plan, however, is not intended to be comprehensive. Instead, it highlights high level policy proposals that have the greatest potential for across-the-board success in reducing opioid addiction and overdose and increasing access to effective treatment (for those that want or need it) and harm reduction services.

There are a host of other potential solutions whose viability depends entirely on the needs and resources of each state and locality and the unique factors that contribute to opioid use disorder and overdose trends in that state. As such, DPA's recommended interventions below should be coupled with respective state-level analysis of data and strategic plans developed by local task forces comprised of representatives from multiple state agencies as well as community members, public health, treatment, and medical experts, social service providers, law enforcement, the research community, insurance providers, and others. A recent strategic plan on addiction and overdose published by the Rhode Island Governor's Overdose Prevention and Intervention Task Force is a prime example of developing interventions targeted to unique state dynamics as they relate to opioid addiction and overdose.[39]

INCREASE ACCESS TO CONVENTIONAL, EFFECTIVE TREATMENT AND EXPAND TREATMENT MODALITIES

The vast majority of people who use drugs, including opioids, never develop problematic drug use and so are not in need of treatment.[40] However, for those who do need treatment, access is lacking. Nearly 80 percent of people experiencing opioid addiction do not receive treatment because of limited treatment capacity, financial obstacles, social stigma, and other barriers to care.[41] Moreover, certain populations, including women, communities of color, and residents of rural areas, are even less likely to have access to treatment. A 2013 U.S. government study found that only 32 percent of treatment facilities in the U.S. have unique programs for women, and only 13 percent have special programs for pregnant or postpartum women.[42] Black and Latino people are less likely to have access to drug treatment than are white people.[43] The Office of National Drug Control Policy has noted that, ". . . much-needed [drug treatment] services may be less available to vulnerable populations, including racial and ethnic minorities like African Americans, Native Americans, Alaskans, [and] Asian American/Pacific Islanders."[44] Rural residents also face significant barriers to accessing treatment.[45] Only 10.7 percent of hospitals in rural areas, for example, offer substance use treatment services compared to 26.5 percent of metropolitan hospitals.[46] Expanding access to effective drug treatment for those who need it, and for all populations, is accordingly a key strategy to reducing the harms associated with problematic use of prescription opioids and heroin.

Opioid Agonist Treatment

Opioid agonist treatment (OAT) refers to the treatment of opioid use disorder through opioid agonist prescription medications, such as methadone and buprenorphine (Suboxone™), which block the effects of opioid use and prevent or relieve withdrawal symptoms and cravings.[47] Scientific research has established that OAT is a cost-effective intervention that increases patient retention in treatment and decreases drug use, transmission of infectious diseases, and criminal activity.[48]

After reviewing 941 studies, the National Institutes of Health Consensus Development Panel concluded that the safety and efficacy of methadone has been "unequivocally established."[49] Moreover, studies have shown buprenorphine to be at least as effective as methadone in sustaining treatment and maintaining abstinence.[50] OAT is endorsed by the Institute of Medicine,[51] the National Academy of Sciences,[52] the National Institute on Drug Abuse,[53] the Office of National Drug Control Policy,[54] the United States Department of Health and Human Services,[55] the Center for Substance Abuse Treatment,[56] the CDC,[57] and the World Health Organization,[58] among others.

Despite widespread acceptance and support, however, access to OAT is severely limited by extensive federal and state regulations and restrictions. A scant 12 percent of individuals with opioid addiction receive methadone,[59] and only nine percent of substance use treatment facilities in the United States offer specialized treatment of opioid addiction with OAT.[60] Indeed, there is absolutely no access to methadone in North Dakota or Wyoming, and very limited access in other states.[61] Though buprenorphine avoids some of the burdensome regulations that govern access to methadone, over half the states (28) have less than 20 physicians that are certified to provide buprenorphine to 100 patients; 13 states have less than five eligible physicians.[62] Moreover, buprenorphine fails to reach many of the communities that need it: buprenorphine patients are more likely than methadone patients to be white, employed and college-educated.[63]

Finally, methadone and buprenorphine are among the only medications that are routinely stopped upon incarceration. In a national survey of 40 state prison medical directors (having jurisdiction over 88% of the of U.S. state and federal prisoners), none offered methadone treatment to any population of opioid-dependent inmates other than pregnant women.[64] These results are consistent with a U.S. Department of Justice report that found that less than 0.5% of state and federal prisoners who met drug addiction criteria received OAT.[65]

To increase access to OAT, DPA recommends consideration of the following proposals:

- Increase Insurance Coverage for OAT: Seventeen state medical plans under the Patient Protection and Affordable Care Act (ACA) do not provide coverage for methadone or buprenorphine for opioid use disorder.[66] Moreover, the Veterans Administration's (VA's) insurance system has explicitly prohibited coverage of methadone and buprenorphine treatment for active duty personnel or for veterans in the process of transitioning from Department of Defense care.[67] As a result, veterans obtaining care through the VA are denied effective treatment for opioid addiction.[68] Insurance coverage for these critical medications should be standard practice.

- Establish and Implement Office-Based Opioid Treatment for Methadone: Currently, with a few exceptions, methadone for the treatment of opioid addiction is only available through a highly regulated and widely stigmatized system of Opioid Treatment Programs (OTPs). Moreover, several states have imposed moratoriums on establishing new OTPs that facilitate methadone treatment despite large, unmet treatment needs for a growing opioid-addicted population.[69] Patients enrolled in methadone treatment in many communities are often limited to visiting a single OTP and face other inconveniences that make adherence to treatment more difficult.[70] Initial trials have suggested that methadone can be effectively delivered in office-based settings[71] and that, with training, physicians would be willing to prescribe methadone to their patients to treat their opioid addiction.[72] Office-based methadone may

help reduce the stigma associated with methadone delivered in OTPs[73] as well as provide a critical window of intervention to address medical and psychiatric conditions.[74] Office-based opioid treatment programs offering methadone have been implemented in California, Connecticut, and Vermont.[75]

- Provide OAT in Criminal Justice Settings, Including Jails/Prisons and Drug Courts: Individuals recently released from correctional settings are up to 130 times more likely to die of an overdose than the general population, particularly in the immediate two weeks after release.[76] Given that approximately one quarter of people incarcerated in jails and prisons are opioid-addicted,[77] initiating OAT behind bars should be a widespread, standard practice as a part of a comprehensive plan to reduce risk of opioid fatality. Jails should be mandated to continue OAT for those who received it in the community and to assess and initiate new patients in treatment. Prisons should initiate methadone or buprenorphine prior to release, with a referral to a community-based clinic or provider upon release. Rhode Island initiated a state-wide OAT in correction program in 2016 that screens all Rhode Island inmates for opioid use disorder and provides medications for addiction treatment for those who need it. Comparing the six-month period before the program was implemented to the same period a year later, the study showed a 61 percent decrease in post-incarceration deaths. That decrease contributed to an overall 12 percent reduction in overdose deaths in the state's general population in the post-implementation period.[78] In addition, drug courts should be mandated to offer participants the option to participate in OAT if they are not already enrolled, make arrangements for their treatment, and should not be permitted to make discontinuation of OAT a criteria for successful completion of drug court programs. The Substance Abuse and Mental Health Services Administration will no longer provide federal funding to drug courts that deny the use of medications when made available to the client under the care of a physician and pursuant to a valid prescription.[79] The National Association of Drug Court Professionals agrees: "No drug court should prohibit the use of [addiction medications] for participants deemed appropriate and in need of an addiction medication."[80]

- Offer Hospital-Based OAT[81]: Emergency departments should be mandated to inform patients about OAT and offer buprenorphine to those patients that visit emergency rooms and have an underlying opioid use disorder, with an appointment for continued treatment with physicians in the community. Hospitals should also offer OAT within the inpatient setting, and start OAT prior to discharge with community referrals for ongoing OAT.

- Assess Barriers to Accessing OAT to Increase Access to Methadone and Buprenorphine: A number of known barriers prevent OAT from being as widely accessible as it should be. The federal government needs to reevaluate the need for and effectiveness of the OTP model and make necessary modifications to ensure improved and increased access to methadone. And, while federal law allows physicians to become eligible to prescribe buprenorphine for the treatment of opioid use disorder, it arbitrarily caps the number of opioid patients a physician can treat with buprenorphine at any one time to 30 through the first year following certification, expandable to up to potentially 275 patients thereafter.[82] Moreover, states need to evaluate additional barriers created by state law, including, among others, training and continuing education requirements, restrictions on nurse practitioners, insurance enrollment and reimbursement, and lack of provider incentives.

Effective Treatment Access, Standards of Care, and Quality of Treatment

There is wide consensus among experts that medical best practice requires that an individual struggling with opioid use disorder should have access to the full spectrum of behavioral, pharmacological, and psychosocial treatments. Effective treatment modalities also need to be available to people at all stages of the recovery spectrum. Barriers to effective treatment, gaps in provider education, and lack of standards of quality care, as well as the best methods and mechanisms to increase access to effective treatment and availability of different types of treatment, are best addressed on a state-by-state basis by experts representing the state's medical and

healthcare community (physicians and nurses, medical universities and students, hospitals, etc.), insurance providers, treatment professionals, social workers, harm reduction providers, mental health professionals, and state and local government officials.

To increase access to effective treatment and enhance the quality of treatment provided, DPA recommends consideration of the following proposal:

- Create Expert Panel on Treatment Needs: States should establish an expert panel to address effective treatment needs and opportunities. The expert panel should evaluate barriers to existing treatment options and make recommendations to the state legislature on removing unnecessary impediments to accessing effective treatment on demand. Moreover, the panel should determine where gaps in treatment exist and make recommendations to provide additional types of effective treatment and increased access points to treatment (such as hospital-based on demand addiction treatment[83]). The expert panel must also set evidence-based standards of care and identify the essential components of effective treatment and recovery services to be included in licensed facilities, especially with regards to opioid agonist treatment, admission requirements, discharge, continuity of care and/or after-care, pain management, treatment programming, integration of medical and mental health services, and provision of or referrals to harm reduction services. The expert panel should identify how to improve or create referral mechanisms and treatment linkages across various healthcare and other providers. The panel should establish clear outcome measures and a system for evaluating how well providers meet the scientific requirements the panel sets. And, finally, the expert panel should evaluate opportunities under the ACA to expand coverage for treatment.

New Treatment Models

While opioid agonist treatment and other forms of evidence-based treatment have strong potential to benefit the vast majority of opioid-dependent people who need treatment, there is still a small group of people with opioid use disorder who are "treatment refractory." In other words, despite their best effort and attempts, these individuals consistently fail to recover from opioid use disorder through existing treatment options. It is estimated that 15–25 percent of the most severely affected individuals with opioid use disorder are not reached or retained by any current treatment.[84] Though this group is a small one, it is also one in which the negative health and social implications of long-term opioid use disorder are most pronounced. The effective treatment of these individuals thus has a high relative potential to impact the harms, and costs, associated with drug addiction.

To provide effective treatment to all opioid-dependent persons who want it, including those for whom conventional treatment modalities have not been effective, DPA recommends consideration of the following proposal:

- Establish and Implement a Heroin-Assisted Treatment Pilot Program: Heroin-assisted treatment (HAT) refers to the administering or dispensing of pharmaceutical-grade heroin to a small and previously unresponsive group of chronic heroin users under the supervision of a doctor in a specialized clinic. The heroin is required to be consumed on-site, under the watchful eye of trained professionals. This enables providers to ensure that the drug is not diverted, and allows staff to intervene in the event of overdose or other adverse reaction. Permanent HAT programs have been established in Canada, Switzerland, the Netherlands, Germany and Denmark, with additional trial programs having been completed or currently taking place in the United Kingdom, Spain, Belgium and Canada.[85] Findings from randomized controlled studies in these countries have yielded unanimously positive results, including: 1) HAT reduces drug use; 2) retention rates in HAT surpass those of conventional treatment; 3) HAT can be a stepping stone to other treatments and even abstinence; 4) HAT improves health, social functioning, and quality of life; 5) HAT does not pose nuisance or other neighborhood concerns;

6) HAT reduces crime; 7) HAT can reduce the black market for heroin; and, 8) HAT is cost-effective (cost-savings from the benefits attributable to the program far outweigh the cost of program operation over the long-run).[86] States should consider permitting the establishment and implementation of a HAT pilot program. Nevada[87] and Maryland[88] have introduced legislation of this nature and, in February 2018, the New Mexico House of Representatives passed House Memorial 56 which charges the New Mexico Legislative Health and Human Services Committee to take testimony on heroin-assisted treatment.[89]

- Evaluate the Use of Cannabis to Decrease Reliance on Prescription Opioids and Reduce Opioid Overdose Deaths: Medical use of marijuana can be an effective adjunct to or substitute for opioids in the treatment of chronic pain. Research published last year found 80 percent of medical cannabis users reported substituting cannabis for prescribed medications, particularly among patients with pain-related conditions.[90] Another important recent study reported that cannabis treatment "may allow for opioid treatment at lower doses with fewer [patient] side effects."[91] The result of substituting marijuana, a drug with less side effects and potential for abuse, has had profound harm reduction impacts. The Journal of the American Medical Association, for instance, documents a relationship between medical marijuana laws and a significant reduction in opioid overdose fatalities: "[s]tates with medical cannabis laws had a 24.8% lower mean annual opioid overdose mortality rate compared with states without medical cannabis laws."[92] Another working paper from the RAND BING Center for Health Economics notes that "states permitting medical cannabis dispensaries experienced a 15 to 35 percent decrease in substance abuse admissions and opiate overdose deaths."[93] There is also some emerging evidence that marijuana has the potential to treat opioid addiction, but additional research is needed.[94]

IMPLEMENT AND FUND COMPREHENSIVE HARM REDUCTION INTERVENTIONS

Safe Injection Facilities / Safe Consumption Services

The negative health and social consequences of drug use remains staggeringly high in large part due to the failure to reach the most marginalized and high-risk drug users who, due to lack of housing and other supportive care, are forced to consume drugs in public spaces. Public drug use is associated with significantly higher rates of overdose, transmission of infectious diseases, and necessity of costly emergency care, as well as a variety of nuisance and safety issues, including improper syringe disposal and "open-air" drug consumption.[95] Safe injection facilities (SIFs) – also known as supervised/safe consumption services/sites or drug consumption rooms – directly, and effectively, address these issues and engage otherwise hard-to-reach users in therapeutic relationships.[96]

Safe consumption services are provided in legally sanctioned facilities that provide a hygienic space for people who use drugs to consume pre-obtained drugs under the supervision of trained staff. Staff members do not directly assist in consumption or handle any drugs brought in by clients, but are present to provide sterile syringes and injection-related supplies, answer questions on safe consumption practices, administer first aid if needed, and monitor for overdose. Staff also offer general medical advice and referrals to drug treatment, medical treatment, and other social support programs. There are approximately 100 such programs operating in 66 cities around the world in nine countries (Switzerland, Germany, the Netherlands, Norway, Luxembourg, Spain, Denmark, Australia and Canada).[97]

Key research findings on SIFs in other countries include: 1) SIFs reduce overdose deaths; 2) SIFs do not encourage additional drug use; 3) SIFs provide an entry to treatment and even abstinence; 4) SIFs reduce risky injecting and transmission of infectious diseases, including HIV, hepatitis C, and hepatitis B; 5) SIFs improve public order by reducing discarded syringes and public injecting; 6) crime is not increased in the areas in which SIFs are located; and 7) SIFs are cost effective.[98] Despite the compelling and uncontroverted evidence, however, no SIFs have been established in the United States to date.

To reduce overdose, transmission of infectious diseases, and nuisances associated with public injecting as well as to increase access to effective treatment, DPA recommends consideration of the following proposal:

- Establish and Implement Safe Drug Consumption Services: States and/or municipalities should permit the establishment and implementation of safe drug consumption services through local health departments and/or community-based organizations. California,[99] Maryland,[100] Massachusetts,[101] New York,[102] Vermont,[103] Maine,[104] and Colorado have introduced legislation to establish safe consumption services. The bill in California has passed in the state Assembly and will shortly be considered by the state Senate. In addition, the City of Ithaca, New York has included a proposal for a supervised injection site in their widely-publicized municipal drug strategy.[105] And, in Washington State, the King County Heroin and Prescription Opiate Addiction Task Force has recommended the establishment of at least two pilot supervised consumption sites as part of a community health engagement program designed to reduce stigma and "decrease risks associated with substance use disorder and promote improved health outcomes" in the region that includes the cities of Seattle, Renton and Auburn.[106] The San Francisco Department of Public Health is also in the process of authorizing safe consumption services.

Naloxone Access and Good Samaritan Reforms

Great progress has been made to increase access to the opioid overdose antidote naloxone, which immediately reverses an overdose and restores normal breathing within two to three minutes of administration without any potential for misuse or abuse, and to encourage the summoning of medical help in an overdose. Though all 50 states and the District of Columbia have passed legislation designed to improve layperson naloxone access, and, as of July 15, 2017, 40 states and the District of Columbia have passed "Good Samaritan" laws, these authorizations vary widely in the access and protections they actually provide.[107] Moreover, community-based programs that offer overdose prevention services to people who use drugs and their friends and family members – the people most likely to be present at the time of an overdose – have been under-resourced and urgently need appropriate support.

To curb opioid overdose deaths, DPA recommends consideration of the following proposals:

- Maximize Naloxone Access Points, Including Lay Distribution and Pharmacy Access, As Well As Immunities for Prescription, Distribution and Administration: Naloxone should be available directly from a physician to either a patient or to a family member, friend, or other person in a position to assist in an overdose, from community-based organizations through lay distribution or standing order laws, and from pharmacies behind-the-counter without a prescription through standing order, collaborative agreement, or standardized protocol laws or regulations. Though some states, including California, New York, Colorado and Vermont, among others, have access to naloxone at each of these critical intervention points, many others only provide naloxone through a standard prescription.[108] Civil and criminal immunities should be provided to prescribers, dispensers and lay administrators at every access point. In addition, all first responders, firefighters and law enforcement should be trained on how to recognize an overdose and be permitted to carry and use naloxone. Naloxone should also be reclassified as an over-the-counter (OTC) medication. Having naloxone available over-the-counter would greatly increase the ability of parents, caregivers, and other bystanders to intervene and provide first aid to a person experiencing an opioid overdose. FDA approval of OTC naloxone is predicated on research that satisfies efficacy and safety data requirements. Pharmaceutical companies, however, have not sought to develop an over-the-counter product.[109] Federal funding may be needed to meet FDA approval requirements.

- Provide Dedicated Funding for Community-Based Naloxone Distribution and Overdose Prevention and Response Education: Few states provide dedicated budget lines to support the cost of naloxone or

staffing for community-based opioid overdose prevention programs. The CDC, however, reports that, between 1996 and 2014, these programs trained and equipped more than 152,280 laypeople with naloxone, who have successfully reversed 26,463 opioid overdoses.[110] Without additional and dedicated funding, community-based opioid overdose prevention programs will not be able to continue to provide naloxone to all those who need it, and the likelihood of new programs being implemented is slim. A major barrier to naloxone access is its affordability and chronic shortages in market supply,[111] which overdose prevention programs, operating on shoestring budgets, can have a difficult time navigating.

- Improve Insurance Coverage for Naloxone: Individuals who use heroin and other opioids are often both uninsured and marginalized by the healthcare system.[112] States should insure optimal reimbursement rates for naloxone to increase access to those who need it most – users themselves.

- Provide Naloxone to Additional At-Risk Communities: People exiting detox and other treatment programs as well as periods of incarceration are at particularly high risk for overdose because their tolerance has been substantially decreased. After their period of abstinence, if they relapse and use the same amount, the result is often a deadly overdose. States should require overdose education and offer naloxone to people upon discharge from detox and other drug treatment programs and jails/prisons. The Substance Abuse and Mental Health Services Administration has declared that prescribing or dispensing naloxone is an essential complement to both detoxification services as well as medically supervised withdrawal.[113] Vermont passed legislation making naloxone available to eligible pilot project participants who are transitioning from incarceration back to the community.[114] In addition, there are other programs/studies that provide naloxone to recently released individuals on a limited basis, including in San Francisco, California, King County, Washington and Rhode Island.[115]

- Encourage Distribution of Naloxone to Patients Receiving Opioids[116]: Physicians should be encouraged to prescribe naloxone to their patients and opioid treatment programs should inform their clients about naloxone, if prescribing or dispensing an opioid to them. Pharmacists should similarly be encouraged to offer naloxone along with all Schedule II opioid prescriptions being filled, for syringe purchases (without concurrent injectable medication), and for all co-prescriptions (within 30 days) of a benzodiazepine (such as Valium™, Xanax™ or Klonopin™) and any opioid medication. The Rhode Island Governor's Overdose Prevention and Intervention Task Force found that offering naloxone to those prescribed a Schedule II opioid or when co-prescribed a benzodiazepine and any opioid would have reached 86% of overdose victims who received a prescription from a pharmacy prior to their death, and could have prevented 58% of all overdose deaths from 2014 to 2015.[117]

- Expand Good Samaritan Protections: "Good Samaritan" laws provide limited immunity from prosecution for specified drug law violations for people who summon help at the scene of an overdose. But, protection from prosecution is not enough to ensure that people are not too frightened to seek medical help. Other consequences, like arrest, parole or probation violations, and immigration consequences, can be equal barriers to calling 911. States with Good Samaritan laws already on the books should evaluate the protections provided and determine whether expansion of those protections would increase the likelihood that people seek medical assistance.

Sterile Syringe Access

Research has conclusively shown that sterile syringe access programs reduce the spread of HIV and viral hepatitis without increasing drug use, crime or unsafe discarding of syringes.[118] Moreover, syringe access programs also provide people who inject drugs with referrals to treatment, detoxification, social services and primary health care.[119] These programs are supported by every major medical and public health organization in

the U.S. and the world, including the American Medical Association, National Academy of Sciences, CDC and World Health Organization.[120]

Despite the documented benefits of syringe access and widespread endorsement, however, these programs remain woefully inaccessible. Approximately half the states in the country have either no syringe exchange programs (14 states) or only have programs available in one or two cities in the entire state (12 states).[121] The result has been devastating for people in rural communities where opioid use is on the rise. Indeed, as of April 2015, there were 120 confirmed and 10 preliminary positive cases of HIV from the sharing of drug injection equipment in a *single county* in Indiana[122] and Kentucky has the highest rate of new hepatitis C cases.[123] The emergency response of both states included permitting syringe access programs, but the crises could have been avoided altogether had the programs been implemented earlier.

To significantly increase access to sterile syringes to both reduce the rates of infectious diseases and provide a gateway to social services and effective drug treatment, DPA recommends consideration of the following proposals:

- End the Criminalization of Syringe Possession: Syringes should be exempt from state paraphernalia laws in order to provide optimal access to people who inject drugs. Twenty-two states criminalize syringe possession.[124] Thus, even if there is a legal access point, such as pharmacy sales, paraphernalia laws still permit law enforcement to arrest and prosecute individuals in possession of a syringe. Public health and law enforcement authorities should not be working at cross-purposes.

- Reduce Barriers to Over-The-Counter Syringe Sales and Permit Direct Prescriptions of Syringes: While the non-prescription, over-the-counter sale of syringes is now permitted in all but one U.S. state, access is still unduly restricted.[125] States should evaluate the potential barriers to accessing syringes over-the-counter and implement measures to improve access. Moreover, doctors should be permitted to prescribe syringes directly to their patients, a practice few states currently permit.

- Authorize and Fund Sterile Syringe Access and Exchange Programs; Increase Programs: States should explicitly authorize and fund sterile syringe access and exchange programs, and states that have already authorized them should evaluate how to increase the number or capacity of programs to ensure all state residents – whether in urban centers or rural communities – have access to clean syringes, as well as evaluate any possible barriers to access such as unnecessary age restrictions.

Drug Checking

Increasingly, one of the risks of opioid and/or heroin use is that people who use these substances will unknowingly acquire a drug that has been adulterated with far more potent synthetic opioids such as fentanyl.[126] While more common in heroin, there have been cases of counterfeit Xanax and Oxycodone tablets adulterated with fentanyl.[127] Adulterated substances lead to higher numbers of hospitalizations and fatal overdoses.[128]

To reduce the number of hospitalizations and fatal overdoses related to adulterated heroin or opioid products, DPA recommends consideration of the following proposal:

- Provide Free Public, Community-Level Access to Drug Checking Services: Though originally intended for urine drug tests, fentanyl testing strips are now being used off label as a harm reduction approach to test for the presence or absence of fentanyl and fentanyl analogs in the illegal drug supply. A February 2018 John Hopkins University study showed that the testing strips could detect the presence of fentanyl nearly 100 percent of the time.[129] The study also found that if drug users knew their drugs were adulterated with fentanyl, 70 percent of them would change their behavior — for example, by not taking the drug or buying drugs from someone else.[130] In May 2017, the California Department of

Public Health began paying for test strips that could be distributed to people who use drugs at syringe exchange programs. Technology also exists to test heroin and opioid products for adulterants via GC/MS analysis, but it has so far been unavailable at a public level in the U.S. (aside from a mail-in service run by Ecstasydata.org). Fentanyl testing strips and other drug checking technologies should be widely available in the community, and state legislatures and regulatory agencies should remove any barriers, such as exempting testing strips or equipment from paraphernalia laws, to ensure wide scale access. Making drug checking equipment and services available to the public would lower the number of deaths and hospitalizations and also allow for real-time tracking of local drug trends.

PREVENT OPIOID MISUSE

Drug use prevention and education programs should be based on rational, honest information and strategies that are scientifically evaluated, supportive rather than stigmatizing, and which promote resiliency among those at risk of developing problematic opioid use and readily offer avenues to care, effective treatment for those who need it, and harm reduction interventions.

To reduce demand for opioids and prevent future opioid use disorder, DPA recommends consideration of the following proposals:

- Implement Comprehensive, Evidence-Based Health and Harm Reduction Curriculum for Youth: The Drug Policy Alliance has developed a comprehensive, evidence-based health and harm reduction curriculum for use in high schools that incorporates scientific education on drugs, continuum of use, and contributors to problematic drug use as well as how to reduce harms related to drug use. *Safety First: Real Drug Education for Teens* was piloted at Bard High School Early College Manhattan (BHSEC) and is being rigorously evaluated to determine whether it has an immediate effect on the thoughts, feelings, attitudes and behaviors of freshman in relationship to substance use and to test the surveys and interview guides to determine that they are valid measurements of curriculum success. Evaluators working through the Research Foundation of the City University of New York will be delivering their findings this summer, which will impact a new version of the curriculum to be released in the fall of 2018.

- Mandate Medical Provider Education: States should mandate that all health professional degree-granting institutions include curricula on opioid addiction, overdose prevention, opioid agonist treatment, and harm reduction interventions, and that continuing education on these topics be readily available.

DECREASE THE ROLE OF CRIMINALIZATION

As overdose rates continue to rise, so do the proportion of policy proposals focused on punishment and retribution instead of public health and safety. Elected officials unfamiliar with, or resistant to, harm reduction, prevention, and treatment interventions are introducing punitive, counter-productive legislative measures in a misguided effort to reduce overdose fatalities. Though their rhetoric may be compassionate, their policies are anything but. They are adopting a law and order approach to solve a public health crisis, with devastating consequences. For instance, before 2004, 29 states had permitted people with substance use disorder to be involuntarily committed to treatment with most of those laws passing in the 1980s.[131] Since 2004, however, as the overdose crisis started its upswing, an additional eight states[132] have passed involuntary commitment laws that permit the institutionalization of people who use drugs without their consent and states with old laws are reinvigorating their enforcement. Pennsylvania, New Jersey, Alabama, Maryland, New Hampshire, and Washington have either introduced involuntary commitment laws for the first time or are proposing changes to existing laws in order to make commitment less difficult.[133] In New Hampshire and Washington, the bills provide for involuntary commitment specifically as applied to opioid use.[134] In addition, since just November 2015, 25 states have passed legislation to increase various fentanyl-related penalties.[135] Perhaps most draconian of all, prosecutors are increasingly charging people who supply the drug that contributes to an overdose death with murder or manslaughter under decades-old drug-induced homicide laws. Moreover, in 2017 alone, legislators in

Connecticut, Idaho, Illinois, Maine, Maryland, Massachusetts, New Hampshire, New York, Ohio, South Carolina, Tennessee, Virginia, and West Virginia all introduced bills to create or increase penalties for a drug-induced homicide offense.[136]

Reducing the Role of the Criminal Justice System

It is widely accepted, both in the general population as well as the academic and scientific communities, that increased arrests or increased severity of criminal punishment for drug-related offenses do not, in fact, result in less use (demand) or sales (supply).[137] In other words, punitive sentences for drug offenses have no deterrent effect. Moreover, the distinction often made between "seller" and "user" is artificial. Though data evaluating the drug use history of people who sell drugs is scant, a 2004 Bureau of Justice report found that an astonishing 70% of people incarcerated for drug trafficking in state prison used drugs themselves in the month prior to the offense.[138]

Criminalizing people who sell and use drugs, including opioids, amplifies the risk of fatal overdoses and diseases, increases stigma and marginalization, and drives people away from needed treatment, health and harm reduction services.[139] Reducing the role of the criminal justice system is therefore critical to ensuring that people who use opioids are able to access the vital treatment and harm reduction services that improve outcomes and enhance quality of life for individuals, families and communities.

To ensure that opioid use disorder is treated as a health issue and that criminalization and stigma do not cut off access to needed treatment and services, DPA recommends consideration of the following proposals:

- Establish Diversion Programs, Including Law Enforcement Assisted Diversion (LEAD): LEAD is a pre-booking diversion program that establishes protocols by which police divert people away from the typical criminal justice route of arrest, charge and conviction into a health-based, harm-reduction focused intensive case management process wherein the individual receives support services ranging from housing and healthcare to drug treatment and mental health services.[140] Municipalities should create and implement LEAD programs and states and the federal government should provide dedicated funding for such programs. Various other forms of diversion programs exist and can be implemented should LEAD prove unsuitable to a particular population or municipality.

  Decriminalize Drug Possession: Decriminalization is commonly defined as the elimination of criminal penalties for drug possession for personal use. In other words, it means that people who merely use or possess small amounts of drugs are no longer arrested, jailed, prosecuted, imprisoned, put on probation or parole, or saddled with a criminal record. Nearly two dozen countries have taken steps toward decriminalization (the best and most well-documented example is Portugal, which in 2001 eliminated criminal penalties for low-level possession and use of all illicit drugs).[141] Empirical evidence from the international experiences demonstrate that decriminalization does not result in increased use or crime, reduces incidences of HIV/AIDs and overdose, increases the number of people in treatment, and reduces social costs of drug misuse.[142] All criminal penalties for possession of small amounts of controlled substances for personal use should be removed. Maryland recently introduced legislation to accomplish this reform.[143] Moreover, various other steps toward decriminalization have been taken in the United States. Twenty states and Washington, DC have reduced or eliminated criminal penalties for personal marijuana possession.[144] Four states – Connecticut, Utah, Maine and California – recently reclassified drug possession from a felony to a misdemeanor.[145] Since the passage of California's law, Proposition 47, more than 13,000 people have been released and resentenced – saving the state an estimated $156 million in incarceration costs averted, which is being reinvested in drug treatment and mental health services, programs for at-risk students in K-12 schools, and victim services.[146] Finally, states that have adopted 911 Good Samaritan immunity laws essentially decriminalize simple possession and other minor drug offenses at the scene of an overdose.

CONCLUSION

Ultimately, if we want to see comprehensive progress on reducing problematic opioid use and all of its associated social impacts, we simply cannot continue to rely on the status quo policy of criminalization. It has already proven a failure on all accounts, causing additional harms beyond those associated with opioid use itself. In addition to decriminalization efforts, policymakers need to evaluate the spectrum of potential harm reduction, effective treatment, and prevention interventions – all backed by rigorous science – and shift the focus of their efforts to implementing policies that actually have the power to save and improve lives.

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