

# Delaware State Epidemiological Outcomes Work Group (SEOW)



## Policy Brief: Addressing Opioid Use in Delaware

September 2017

Funding for this project (SP020704) has been provided by the Department of Health and Social Services, Division of Substance Abuse and Mental Health - State of Delaware through a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) - CFDA 93.243.

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## Introduction

The State of Delaware, like other states across the nation, is facing an increasingly complex public health crisis related to the misuse and abuse of opioids. This includes both prescription painkillers, as well as illegally obtained pills, heroin, and street-derived synthetic opioids, such as fentanyl. Over the past several years, Delaware has responded to this crisis in multiple ways: legislation has been passed that supports programs and initiatives that are designed to prevent opioid misuse and addiction; harm reduction strategies have expanded that reduce risk of overdose, and other associated health concerns related to use; and, policymakers have supported increased expansion and access to treatment services. Yet, despite these efforts, there is much more that can be done to reduce the harm caused by opioids.

The goal of this report is to provide a summary of a few of the approaches that states have implemented to respond to the opioid epidemic. The first part provides an overview of the problem across the nation, and within the State of Delaware. The second part outlines potential policy approaches that are considered effective in addressing the issue among the following topic areas: interventions within the medical arena, including prescription drug monitoring and surveillance; harm reduction strategies; criminal justice considerations; and, treatment expansion and access.

## Overview of the Opioid Crisis

### Nationwide Concerns

Over the past decade increased attention has been drawn to opioid misuse and addiction across the country. Most recently, Governor Chris Christie of New Jersey oversaw the President's Commission on Combating Drug Addiction and the Opioid Crisis, which reviewed relevant statistics and offered several recommendations for policy change. The federal Comprehensive Addiction and Recovery Act of 2016 was passed, with bipartisan leadership and support, partly in response to the increased harms associated with the national opioid epidemic. The opioid epidemic has become a fixture of media reports and national headlines, and federal and state policymakers have invested millions in policies and programs in response.

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According to data drawn from the National Survey of Drug Use and Health (NSDUH), in 2016, prescription painkillers were the second most abused illicit drugs in the country (after marijuana) with an estimated 3.3 million people reporting past month use (SAMHSA, n.d.). In comparison, 475,000 individuals, over the age of twelve, are estimated to be past month users of heroin, according to the same survey. While the extent of use for prescription painkillers is much higher than that of heroin, studies consistently show that many people who become addicted to prescription painkillers eventually transition to heroin. Several researchers have found that up to 75 percent of current heroin users initiated opioid use through prescription painkiller use (see Compton, Jones, & Baldwin, 2016, for one review of the literature).

High rates of opioid use lead to numerous public and social costs. States across the nation, including Delaware, have witnessed increases in overdoses and death related to the use of opioids. The Centers for Disease Control and Prevention (CDC) estimate that [every day 91 people die from an overdose of opioids](#) (CDC, n.d.). Increasingly, heroin is associated with overdose deaths; between 2010 and 2015 overdoses associated with heroin use tripled (Hedegaard, Warner, & Minio, 2017), although some of this increase may be related to fentanyl and heroin fentanyl mixes. Fentanyl, generally prescribed for palliative or hospice care, is also manufactured illegally on the street, or imported illegally from other countries. It is frequently mixed with heroin or cocaine, but it has also been found in pill form and sold as counterfeit pain pills (DEA, 2016). According to the CDC, an estimated third of all deaths attributed to prescription opioids are due to fentanyl. The [death rate associated with the use of synthetic opioids, which includes fentanyl, increased over 70 percent in just one year, between 2014-2015](#) (CDC, n.d.).

In addition to the risk of overdose and death, opioids are linked to other public health problems, notably increased risk of HIV and Hepatitis C, due to needle sharing, and neonatal abstinence syndrome (NAS), which affects the infants of addicted mothers after birth. There has also been an increase in the number of babies born with NAS; one study found a 300 percent increase in the number of babies with NAS in 28 states between 1999 and 2013 (Ko et al., 2016). Babies born with this condition experience symptoms of withdrawal which complicates healthy development and prolongs hospital stays.

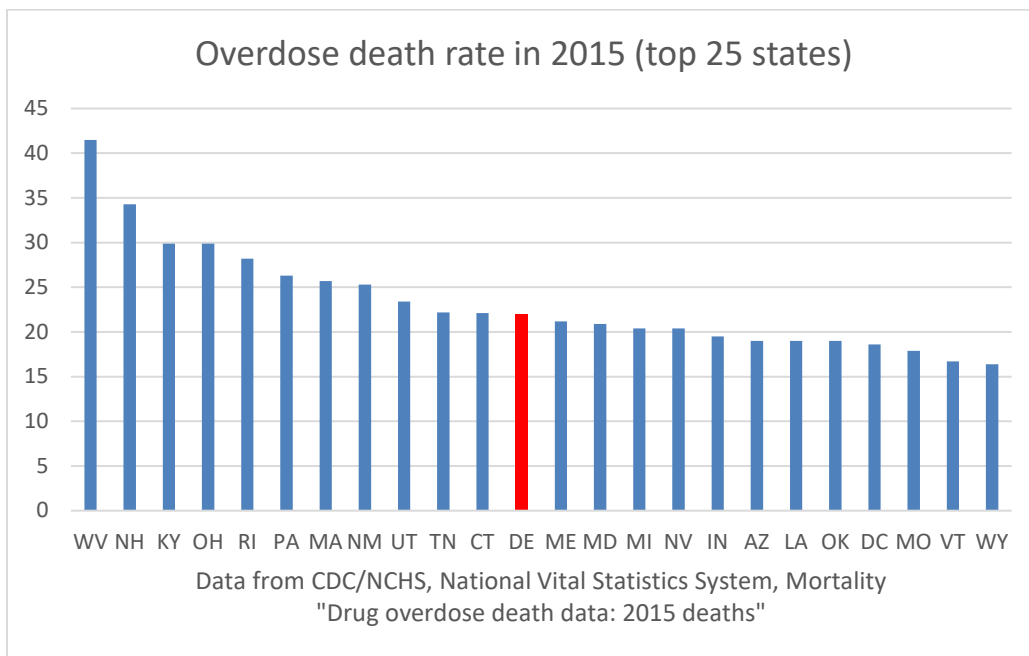
Beyond the public health challenges associated with the use of opioids, a plethora of social costs are associated with the use of opioids: the fraying of relationships; children with addicted parents; loss of

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employment due to addiction; homelessness; and crime. Those who have been impacted by opioids in the United States span every race, class, and community. The effects of this epidemic reach everyone.

## Opioid Use in Delaware

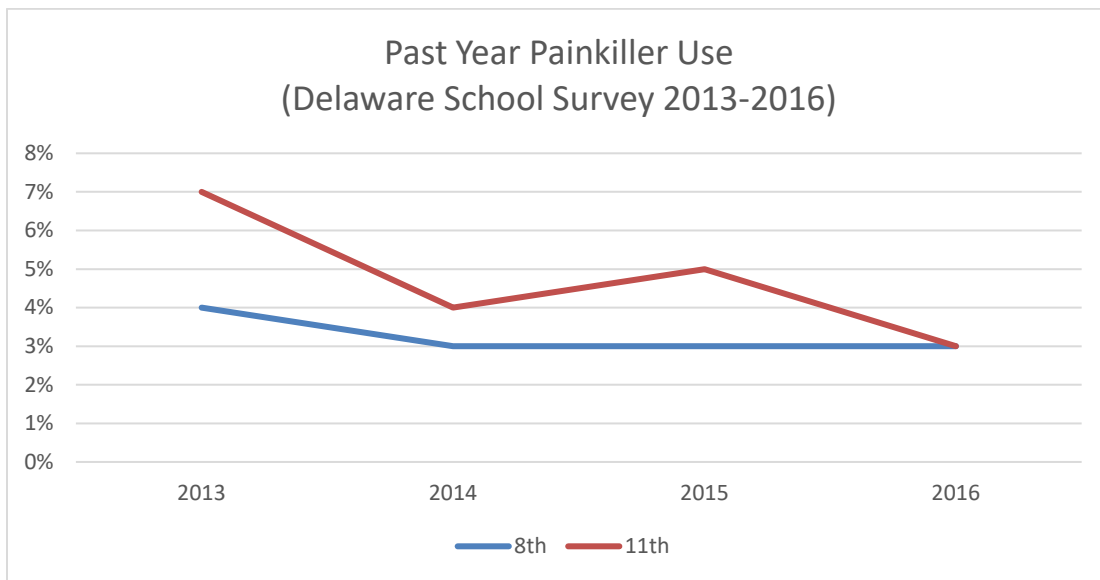
While the opioid epidemic has garnered national attention and elicited concern across the country, Delaware is one of the states that has been impacted more heavily by this crisis. The rate of drug overdose in Delaware has increased over the past several years in all categories of drugs, but this is especially true of opioids. Delaware had the eighth highest heroin fatality rate among states in the US in 2014 (NSC, 2016). According to 2015 mortality data from the CDC, Delaware had an overdose death rate of 22 per 100,000 (CDC, 2016). More than 70% of drug overdose deaths in Delaware in 2014 were related to opioids, with 42% involving prescribed opioids and 29% involving illicit drugs such as heroin (Prescription Behavior Surveillance System, 2016). Increasing fentanyl-related overdoses have become a major public health concern as well. In 2016, fentanyl overdoses in Delaware tripled, resulting in 120 confirmed fentanyl-related deaths (Horn, 2017).



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A larger portion of drug overdose deaths in Delaware are related to prescription drugs than heroin alone (Prescription Behavior Surveillance System, 2016).

According to data collected by the Center for Drug and Health Studies through the Delaware School Surveys (DSS), in 2016 less than 1% of students in 8<sup>th</sup> and 11<sup>th</sup> grade reported using heroin in the past year. Furthermore, approximately 3% of students reported using prescription painkillers. Data from the DSS, illustrated in the chart below, show that past year self-reported painkiller use has been declining among 8<sup>th</sup> and 11<sup>th</sup> graders. Results from the National Survey on Drug Use and Health show that among adults, self-reported rates of use are higher than that of adolescents. In Delaware, 9.5% of adults aged 18 to 25 report the nonmedical use of pain relievers in the past year, which is higher than the national average response rate of 8.3%.



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## Policy Responses to the Opioid Epidemic

States across the nation have tackled the opioid epidemic through diverse strategies. In this report, these topics are organized broadly under four themes: Interventions within the medical community (prescribing, pain management, screening and referral), treatment expansion, and interventions with justice involved individuals, and harm reduction strategies.

### Potential Policy Responses within the Medical Community

There are many points of policy consideration within the healthcare arena that have the potential to impact opioid abuse prevention and intervention. The following section outlines these areas and potential policy and practice responses.

#### *Prescription Drug Monitoring Programs*

Every state in the United States, with the exception of Missouri, currently has a prescription drug monitoring program (PDMP) in place. PDMPs are statewide databases that house information related to the types and amounts of drugs prescribed within the state. Medical providers and pharmacists use these databases to ensure that patients are not currently being prescribed drugs that may interact poorly with current prescriptions, and to identify patients that change doctors frequently to gain access to large numbers of prescription drugs (“doctor shoppers”). In addition, state regulatory offices and law enforcement agencies can also use these data to locate providers who issue high numbers of prescription drugs (“pill mills”). Evidence for the effectiveness of PDMPs is limited, but several studies show significant results in several areas, including reductions in overdose deaths, reduction in opioid prescribing rates, and lower rates of prescriptions with high daily morphine milligram equivalents, among other outcomes (for reviews see: the Academies, 2017; Haegerich, Paulozzi, Manns, and Jones, 2014; Patrick, Fry, Jones, & Buntin, 2016).

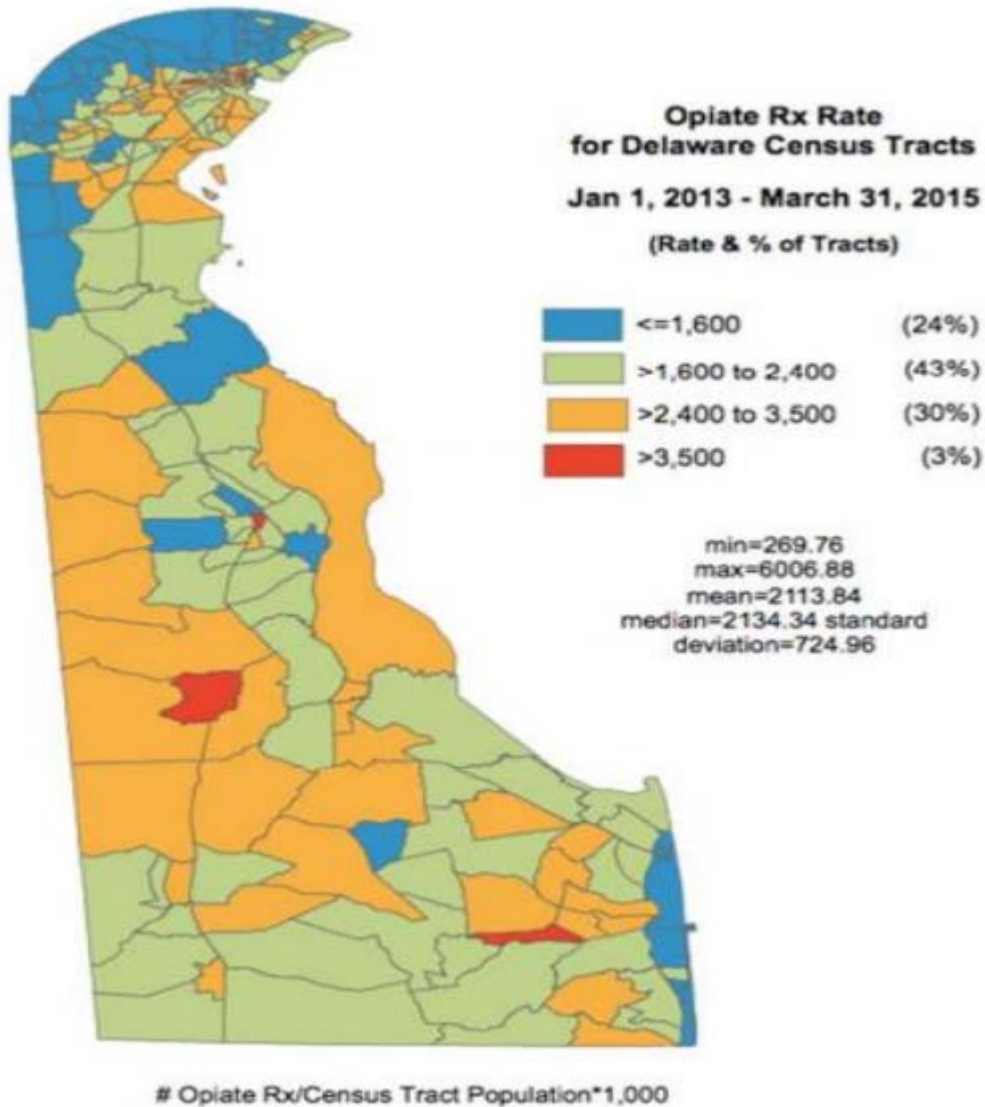
States differ in how PDMPs are managed, and which groups are required to report to the PDMP and monitor the PDMP. Timelines to report data, and mandatory queries to the system prior to prescribing medications, also vary between states. In addition, states differ in the types of groups that are allowed

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to access data from the PDMP, and may include any combination of the following: prescribers, pharmacists, law enforcement, regulatory bodies, insurance companies, worker compensation companies, behavioral health providers, substance abuse treatment providers, other state's PDMPs, and researchers. The Governing Institute (2017) recommends states expand the groups who are allowed to use the system to include insurance companies and health plan companies, as they are major stakeholders in the prescribing process. In addition, they also recommend that states mandate a 24 hour time period for providers to enter data after prescription is filled and a mandatory query to the PDMP before every prescription is filled.

Delaware enacted its Prescription Monitoring Program in August 2013, with prescribers to have been fully registered and using PMP by January 1, 2014. All practitioners that have a controlled substance registration, and pharmacists who dispense controlled substances in Delaware, must register with the system, with the exception of veterinarians. All practitioners are required to submit data on prescriptions of controlled substances, with a few exceptions: substance abuse treatment programs, prescriptions that are administered short term (under 72 hours) and in an emergency care situation, and practitioners that administer prescriptions that have been legally prescribed by another practitioner (Division of Professional Regulation, State of Delaware, n.d.). Mandated users must report daily to the PMP.

## Rate of Opioid Prescriptions by Geographic Region in Delaware



Evaluation of Delaware’s PMP from the Prescription Behavior Surveillance System at Brandeis University, which reports to the CDC, showed over a 50 percent decline, between 2012-2015, in the rate of multiple provider episodes in the state, which are correlated with “doctor shopping.” In addition, they reported a 26 percent decline during the same time period of high dosage prescriptions (over 100 morphine milligram equivalents, MMEs). Data from the PDMP has also been used to identify troubling prescribing patterns. One analysis from the University of Delaware of the Prescription Drug Monitoring Program found that only 1% of doctors wrote a quarter of opioid prescriptions in the state (Anderson,

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Martin, Fang, & Li, 2016). PMP data was also used to locate providers who prescribe disproportionately large amounts of prescription opioids. As a result, in 2017, three doctors were sanctioned for over-prescribing (Goss, 2017a). However, Delaware still has room for improvement in its prescribing practices. In 2016, Delaware had the highest prescribing rate in the nation for long acting / extended release opioids in the nation. Delaware also had the highest high-dosage ( $\geq 90$  MME a day) prescribing rate in the nation. Delaware's overall prescribing rate was 79.2, very close to the national mean rate of 76.8 (CDC National Center for Injury Prevention and Control, 2017). Both long acting / extended release opioids and high MME prescriptions have been associated with increased risk of overdose and substance use disorder, in comparison to immediate-release formulations (the Academies, 2017).

Top ten States high dosage opioid prescribing rates (greater than or equal to 90 MME/day)

Delaware	12
Utah	10.1
Nevada	10
Maine	9.9
Tennessee	9.8
New Hampshire	9.7
Arizona	9.6
Alaska	9.5
Oklahoma	9.5
Vermont	8.9
Alabama	8.8

Top ten states LA/ER 2016

Delaware	12.7
Tennessee	11
Oklahoma	10.4
Maine	10.3
Alabama	9.9
New Hampshire	9.7
Vermont	9.3
Idaho	8.8
Nevada	8.7
Arizona	8.5
Oregon	8.5

### *Prescribing Guidelines and Limits*

In 2016, the CDC published several guidelines for prescribing opioids for chronic pain (Dowell, Haegerich, & Chou). These guidelines include several recommendations. The CDC recommends the use of non-opioid medical approaches where possible. This includes pain medicines that are not opioids, such as ibuprofen or acetaminophen, but also alternative approaches like gentle exercise and physical therapy. Before prescribing any opioids, practitioners should develop a treatment plan with the patient, and educate the patient on the risks associated with the use of opioids. The CDC recommends that

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when prescribing opioids, prescribers should start with the lowest effective dose and increases in dosage should be made slowly. These patients should be monitored for risk of addiction. This includes checking the state PDMP for any red flags that may signal risk of addiction, and potentially conducting a urine drug screen to identify any current illicit drug use. Prescribers should follow up with the patient within three months of the first visit. Follow up visits should include a reassessment of pain, additional screening for addiction risk factors and a check-in with the PMDP. If the patient is receiving a prescription of above 50 MME a day, practitioners should consider whether the patient should have access to naloxone, an opioid antagonist that can be used to revive someone in the event of an overdose. If above 90 MME, the practitioner should also consider referring the patient to a pain specialist.

As of April 2017, Delaware clinicians are required to follow new prescription guidelines which are similar to the recommendations proposed by the CDC and outlined above. Under these new regulations, medical practitioners can only prescribe a seven day supply of opioid medicine for first time patients with pain due to medical procedures or injuries. This will also apply to all minors who experience acute pain, whether first time patients or not. If more medicine is to be supplied, the PMP must be referenced for the patient's history with prescription drugs, and clinicians should follow a set of prescribing guidelines that mirror the CDC guidelines. Doctors can still use their medical discretion to prescribe outside of these limits, but they must provide explanation for their decision to do so. In addition to limits on prescriptions, patients who receive opioids must sign informed consent forms that acknowledge that they understand the risk associated with the use of opioids (Goss, 2017b), and doctors must follow up with patients who receive opioids to monitor for signs of misuse and addiction. In addition to the recent prescribing guidelines, Delaware mandated prescriber education in 2015. Practitioners who want to gain or renew a Controlled Substance Registration must take a one hour class that outlines the laws, regulations, and programs regarding DE substance distribution.

### *Patient Review and Restriction Programs*

Patient Review and Restriction programs (PRR), also known as lock-in programs, are insurance programs that require individuals that have shown risk signs for misuse of controlled substances to only access prescriptions from a single provider and/or pharmacy. One review (Haegerich, Paulozzi, Manns, & Jones, 2014) summarized the results of several studies which found significant drops in multiple

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provider episodes in states after implementing PRR programs, as well as other positive outcomes, including decreased use of emergency departments among those enrolled in these programs, and decreased use of narcotics. While most states have PRR programs, these programs vary in how they are implemented, and their programmatic capacity. A [recent report by the Pew Charitable Trusts](#) offered five recommendations for states to improve their Medicaid PRR programs: 1) States should assign enrollees to both pharmacies and prescribers; (2) PRR programs should be able to access state PDMPs; 3) PRR programs should also offer enrollees other services to improve health outcomes; 4) programs should expand the list of drugs that are at risk of misuse; 5) and identify best practices for enrollment criteria (2016). While Delaware does have a Medicaid lock-in program, it is unclear if it meets any of these recommendations, as information about the program is not readily available to the public.

### *Abuse-Deterrent Formulations*

Pharmaceutical companies have responded to the opioid crisis by creating abuse-deterrent formulations (ADF) of prescription opioids. These formulations change the structure of the drug so that drug users cannot snort or inject them. However, they can still be abused orally, and are up to three times more expensive than regular formulations. According to the Governing Institute (2017), several governors have vetoed legislation involving these formulations because of the high price associated with the drugs, and very little evidence to support that these drugs make a significant impact on the opioid epidemic. One study (Cicero, Ellis, & Surratt, 2012) that examined the effectiveness of abuse-deterrent OxyContin found that while the introduction of the ADF version did decrease the misuse of OxyContin, the use of these drugs did not decrease opioid misuse for the majority of the study population. This study incorporated surveys of cohorts with opioid dependence totaling 2,566 over nearly three years. The researchers found that 21 months after the introduction of the ADF version of OxyContin, survey respondents were reporting a decrease of 35.6% in the use of OxyContin as the main prescription drug they use to get high. However, reports of heroin use had doubled since the introduction of the ADF version. Follow-up qualitative interviews with 103 of these patients revealed that nearly a quarter of respondents (24%) still abused the new formulation, while 66% of the respondents had turned to other opioids instead, including heroin and fentanyl.

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### *Safe Storage and Disposal of Prescription Medicines*

In addition to the policies listed above, states, jurisdictions and community organizations have organized efforts to improve the safe storage and disposal of prescription drugs. These initiatives include providing patients with prescription lock boxes, providing prescription disposal locations, and participation in the DEA sponsored National Prescription Drug Take-Back Day. There are few evaluations of these measures to provide evidence of their impact in reducing diversion and misuse. Beyond the intended role to prevent prescription drug diversion, these programs also serve as important public and patient education initiatives. Delaware currently has 21 permanent prescription disposal locations across the State and participates in the annual Drug Take-Back event. Additionally, Deterra Drug Deactivation Systems are disseminated by multiple community agencies throughout the State. The Deterra Bags are used by an individual to deactivate prescription drugs that are no longer needed

### *Reconsidering Options for Treating Chronic Pain*

Medical practice around pain management shifted dramatically during the 1990s. The American Pain Society's "Pain is the Fifth Vital Sign" campaign gained traction nationwide. In 2001, the Joint Commission published a report which included a strong endorsement of the use of pain medicine<sup>1</sup> and a recommendation for practitioners to "probe for pain." As a result, quality standards in many medical practices required physicians to address pain management with patients. Coupled with lobbying and educational programming by Purdue Pharma, opioids became a standard response to chronic pain over the past two decades (Kolodny et al., 2015).

Emerging evidence suggests that while acute pain caused by medical procedures responds well to opioids, long-term management of chronic pain through the use of opioid prescriptions is questionable, with the exception of advanced cancer, palliative, or hospice care (the Academies, 2017). Alternatives to long-term opioid use should be considered, such as cognitive-behavioral therapy, physical therapy, gentle exercise, and more (see: the Academies, 2017, for a full review).

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<sup>1</sup> The Joint Commission refutes claims that they are partly responsible for the current opioid epidemic. See their statement [here](#). In 2012, the Joint Commission revised their statement on pain standards, partly in response to criticism that these standards played an outsized role in the epidemic of prescription drug misuse, addiction and overdose.

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As states have implemented practices to reduce the supply of prescription opioids, resistance has come from chronic pain patients, and the medical advocates that serve this population. These groups argue that reducing current prescription levels and/or increasing the bureaucratic hurdles that a chronic pain patient must jump to gain access to needed medicines is unjust and dangerous. During a sustained period of use, patients build up tolerance to opioids, and often require higher dosages to achieve alleviation of pain. Reducing prescription levels drastically can lead to symptoms of withdrawal, increased pain, and may lead individuals to underground channels, in order to sustain their current level of functioning. States should play a role in supporting these patients so that any reduction in current prescription load is done in gradual increments, in a slow process of tapering (the Academies, 2017).

In addition, many medical users of prescription opioids show indications of opioid dependence disorder, and are at risk of overdose, particularly adults over the age of 55 (Kolodny et al., 2015). Undue emphasis on illegitimate users of prescription drugs obscures the many people with current prescriptions that may also need access to prevention and treatment resources in the State.

### *Screening, Brief Intervention, and Referral to Treatment (SBIRT)*

SBIRT is an evidenced-based program that is found in a variety of medical settings, as well as additional types of settings within the broader community. SBIRT consists of a three-step process to identify individuals that are at risk of substance use disorders, or are already showing signs of addiction, and providing a brief intervention about the health risks associated with continued use of the substance, and finally, referral to treatment resources. First used to screen for alcohol use disorders, it is currently used to screen for addiction to any substance. In 2003, SAMHSA began funding states, municipalities, and institutions to expand SBIRT nationally. Currently, 29 states have received funding to expand SBIRT within their states.

While research indicates that SBIRT can reach and identify a large number of people with substance use disorder (Babor, Del Boca, & Bray, 2017), some research shows mixed evidence of cost-effectiveness. Barbosa, Cowell, Bray, & Aldridge (2015) provide a cost analysis of the use of SBIRT in emergency rooms versus outpatient settings. Their research indicated that SBIRT was most cost-effective within the emergency room setting. Horn and colleagues (2017) found that overall SBIRT was not cost-effective in emergency room settings, although cost effectiveness improved during peak hours as down time

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without a significant number of people being screened contributed to high costs. Their research included a multi-site randomized controlled trial, which included self-reported follow up data. Individuals enrolled in the study were assigned to three groups: a group that only received a brochure on substance abuse and access to treatment (minimal screening only); a group that was provided screening, assessment, and referral to treatment (SAR); a group that received SAR plus brief intervention with two follow up phone conversations. Neither of the latter groups had any significant differences in self-reported crime, medical status, health services utilization, or employment than the minimal screening only group.

Research indicates that when SBIRT is implemented with fidelity, the effectiveness of the program improves. However, barriers to completing all stages of the SBIRT process have been documented by researchers, particularly: clinical buy-in; adequate training; and medical follow-up when different stages of SBIRT are conducted by different members of the medical team (see: Agle, Gassman, Vannerson, & Cragg, 2014 for one example). Ensuring that there is a coordinated effort across medical care teams, and a strong understanding of program components is critical for success. During the five years that New Mexico was provided federal resources for SBIRT from SAMHSA, over 50,000 individuals were screened. Evaluators of the New Mexico SBIRT initiative found that a strong component of this project was a local nonprofit organization that served as a statewide coordinating source for SBIRT. This organization, including its SBIRT telehealth networking program, improved information and resource sharing across medical communities, and improved clinical buy-in (Gonzales et al., 2012).

States can decide whether they will activate the Medicaid codes used for reimbursement for SBIRT. Delaware currently does provide reimbursement for SBIRT (Institute for Research, Education & Training in Addiction, 2017), however the State has never received federal funding to implement SBIRT statewide. A local screening and referral program based out of the Christiana Care Health System (CCHS), Project Engage, however, has impacted a significant number of local residents. This project started as a partnership between the CCHS and Brandywine Counseling and Community Services in 2011, and currently operates out of the emergency departments at both the Wilmington and Christiana hospitals. Akin to SBIRT, Project Engage screens patients for substance use disorders and refers them to treatment. This project includes peer Engagement Specialists who work with patients to set goals and develop a treatment plan. One early evaluation of Project Engage found that 43 percent of the patients who participated in Project Engage between September 2008 and December 2010 were admitted to

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treatment after discharge from the hospital. Of the 43 individuals that they followed up at six months and twelve months after discharge, they found significant decreases in emergency department visits, inpatient behavioral health or substance abuse admissions, and other inpatient medical admissions from their previous medical admission history, prior to participation in Project Engage (Pecoraro, et al., 2012).

SBIRT has also been used as a tool to assist medical providers when they make the choice to prescribe opioids. A webinar from NORC at the University of Chicago discusses how physicians can play a key role in screening patients for mental health and addiction risk factors, and how health teams can provide motivational interviewing, monitoring, and resource navigation for chronic pain patients who may be at risk of opioid misuse and addiction (Bostic, Matney, & McPherson, 2014). Presenter, Jim Matney, SBIRT Clinical Director in West Virginia, discussed how SBIRT has been effective for screening for potential opioid addiction risk factors within the chronic pain patient population in the state. Physicians work with SBIRT-trained nurses, by way of a “warm handoff,” to screen patients, provide motivational interviewing and counseling on addiction, and follow-up after thirty days. In addition, the physicians provide referrals to behavioral health and physical therapy, as needed, and follow up to ensure follow-through of the treatment plan. Patients are not denied opioid medications if their pain problems are severe enough to warrant them, however, they are only prescribed on a trial basis and prescriptions are withdrawn if the patient does not follow the treatment plan or show indicators of potential abuse, for example, asking for a re-fill early.

## Policy Responses Related to Treatment

*“It also is important to keep in mind that restrictions on lawful access to prescription opioids can have other untoward effects: any policy designed to shrink the incidence of future OUD (and other harms) due to use of prescribed opioids by curtailing legal access to these medications will inevitably drive some people who already have OUD into the illegal market. In the committee’s view, it is therefore ethically imperative to couple a strategy for reducing lawful access to opioids with an investment in treatment for the millions of individuals who already have OUD.” (From [Pain Management and Opioid Epidemic](#), the National Academies of Science, Engineering, and Medicine, 2017, pg. 11, Summ.).*

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### *Medical Assisted Treatment*

Medical assisted treatment (MAT) is the use of pharmaceuticals, often in combination of substance abuse counseling, to help individuals who have opioid dependence disorder wean off of opioids safely. Emergent evidence within the field of addiction has led to a near-consensus view that addiction is a chronic disease, and explanations for causation that draw on moral or behavioral views of addiction, do not adequately address the complexity of the disease. In this light, some addiction researchers compare medical treatments for opioid dependence disorder, as akin to insulin shots for a person with diabetes—a necessary daily support mechanism that allows individuals to regain normalcy, and manage their disease. The three types of medicine commonly prescribed for opioid dependence disorder are methadone, buprenorphine, and naltrexone (brand name, Vivitrol). Not all states cover these three FDA approved medications, although the State of Delaware does provide coverage for all three treatments.

**Methadone** is an opioid agonist, that is, it interacts with the opioid receptors in the brain, much like heroin or morphine. However, when taken as prescribed it does not create the euphoric effects of other opioids. Methadone is only available at drug treatment centers that are licensed to provide these services. While methadone is sometimes abused, and is implicated in overdose deaths related to prescription opioids, much of the negative impacts related to methadone are related to methadone that is prescribed for pain treatment (the Academies, p. 235), rather than that which is prescribed at treatment centers. Individuals who use methadone will experience withdrawal if they leave treatment without managed tapering off of the substance. Individuals who are unwilling to go a treatment center on a regular basis, or have barriers to getting to treatment on a regular basis (such as dependent children, transportation barriers, etc.), may prefer other forms of MAT.

**Buprenorphine** is a partial agonist. It binds to some opioid receptors, while blocking others. The Drug Addiction Treatment Act of 2000 allowed medical providers, other than treatment centers, to prescribe buprenorphine to those with opioid dependence disorder, however, it placed a cap on the number of people a provider can serve in a given year, and requires extensive paperwork and other requirements to prescribe. Recent federal legislation expanded the number of individuals a medical provider can prescribe to 275 individuals after the first year of only 100 patients.

One of the potential benefits of buprenorphine is that it allows individuals who are reluctant to go to a treatment center, because of the associated stigma, or due to other barriers, a discreet way to receive MAT. It also allows for more flexibility in an individual's schedule, because they do not have to show up

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routinely for the next administration of the drug—they can self-administer at home. In addition, it provides a MAT option for portions of the country that do not have access to a treatment center. The Academies notes that despite the limited number of providers that are currently certified to prescribe buprenorphine, national studies show that it is still being underutilized (p. 237).

Buprenorphine is sometimes diverted for illicit use, particularly in prison settings, and has been implicated in several overdose deaths (Sontag, 2013; Lofwall & Walsh, 2014). Suboxone is a combination of buprenorphine and naloxone, which reduces the potential for diversion and abuse. Naloxone is an opioid antagonist, and it blocks the opioid receptors. If the drug is crushed and injected, it will cause unpleasant withdrawal symptoms. This decreases the interest in the misuse of the drug without a prescription. However, Suboxone can be expensive, and is sometimes not covered by insurers.

**Naltrexone**, often referred to by the brand name, Vivitrol, is an opioid antagonist. It blocks the opioid receptors so that the effects of opioids cannot be felt. Some policymakers prefer that those with opioid dependence disorder use Vivitrol instead of the other two MAT approaches because of the common stigma that the methadone and buprenorphine replace one opioid with another. However, Vivitrol is not for everyone. It requires seven days of withdrawal before starting the medication, which may exclude many individuals who cannot withstand that difficult period. In addition, there is a great risk of overdose and death if a person stops the use of naltrexone and uses opioids. It is better suited for people who are coming out of prison or other institutions who have already undergone withdrawal, but upon returning to old patterns of living, may be at risk of using opioids.

The National Academies of Science, Engineering and Medicine (the Academies, 2017) provide an extensive review of the literature on the effectiveness of Medically Assisted Treatment (MAT), including an overview of literature reviews conducted by other scholars. The majority of evidence demonstrates that MAT is the most effective treatment for opioid dependence disorders. Abstinence only approaches are associated with higher mortality rates, and greater returns to use than medical opioid maintenance therapies. MAT remains effective - and in several cases is just as effective - without counseling services, beyond the initial clinical visit. For this reason, an individual can begin MAT even when there is a waiting list for counseling services. For example, a patient could begin receiving MAT through a non-treatment center route, with an initial counseling session provided by a primary care provider, or in an emergency

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room setting, therefore reducing the risk of the patient going into withdrawal, and/or potentially overdosing on opioids (p. 233). Currently, however, the FDA requires counseling as a part of MAT. States differ in what MAT approaches they cover, the dosages permitted, and the requirements for counseling.

### **Eliminating Barriers to Treatment in Delaware**

Between 2013 and 2015, admissions to substance use treatment in Delaware increased by more than 600%. More than a third (35%) of all treatment admissions in 2015 in Delaware were related to heroin, with an additional 5% of admissions related to other opioids such as prescription drugs (TEDS, 2015). According to the Department of Substance Abuse and Mental Health in Delaware, only eleven of the licensed and certified mental health and substance abuse service providers in the state offer medication-assisted treatment and specific services for treatment of opioid addiction (DSAMH, 2016).

The Opiate and Heroin Dependency Transition Committee (OHDTTC) last year prepared a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for the New Castle County Executive Matt Meyer. Their report indicates that a substantial gap exists between those who need treatment services and those who are able to access treatment services. This is due to a combination of the lack of public knowledge about the existing resources in New Castle County and the limitations in the services that are presently available to residents (Anderson et al., 2016).

Delaware ranks on the higher end of the scale on rates of dependence and overdose in relation to the rest of the country, although Delaware currently has low capacity to admit the number of people who need and want treatment (Taylor & Bothum, 2014a). Often, people who seek treatment in Delaware detox in jail and prison or they need to leave the state to find a treatment facility to admit them (Horn, 2016; Taylor & Bothum, 2014b). The local newspaper, *The News Journal*, has documented several stories of people being denied treatment coverage, being put on waitlists for residential settings, or choosing to leave the state due to treatment shortages.<sup>2</sup>

During the summer of 2017, Senate Bill 41 and House Bill 100 were passed to address some of the existing barriers to treatment in the state. The first removes pre-authorization requirements for MAT and requires insurance coverage of residential treatment if medically necessary. Importantly, it permits

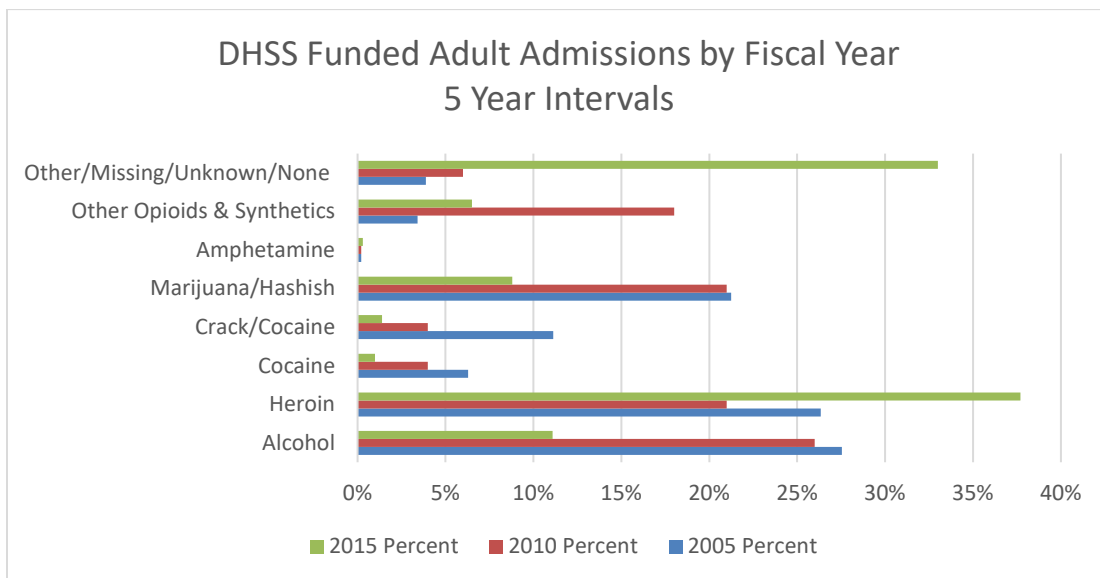
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<sup>2</sup> A full list of *News Journal* coverage is available here: <http://www.delawareonline.com/topic/885f595b-ce73-4ce1-9002-092931aba2d0/heroin-delawares-deadly-crisis/>

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a patient to receive residential treatment for up to fourteen days before the determination of medical necessity. Prior to this legislation, many Delaware residents were turned away from residential treatment unless they were displaying signs of imminent risk of overdose—a dangerous threshold that put many at risk of relapse and death. The second bill provides legal resources to individuals and families that are denied treatment coverage from insurance companies. Both of these bills are important steps to eliminate barriers to treatment. Additionally, state and federal funds have been set aside for treatment expansion over the next few years.

However, many barriers to MAT still exist in the state. The largest of these are the limited resources available to meet treatment need, particularly in inpatient settings. Only a portion of the treatment centers that provide treatment for opioid dependence offer inpatient services. Requiring insurance companies to cover treatment is an incomplete strategy if there are not enough treatment resources to meet the need. Delaware data shows that an increasing number of individuals are seeking treatment for heroin and other opioids. In 2005, 25 percent of those in DSAMH licensed facilities that sought treatment did so for heroin use. Ten years later, 38 percent of those in treatment were there for heroin use. Those seeking treatment for other opioids and synthetics more than doubled during the same time period. Most remarkably, the number of people who entered treatment where the primary drug at admission was other/missing/unknown/none increased from 4 percent of patients in 2005 to 33 percent in 2015. It is likely that some portion of this population is made up of opioid users.



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### ***States' Responses to Treatment Demand***

The following are examples of policy responses and interventions that various states throughout the US have implemented to expand treatment services.

#### **Medicaid treatment waiver**

Four states have been granted a waiver from the federal government to provide more than sixteen beds in a treatment facility. Several other states have submitted applications for this waiver. Currently, without this waiver, federal funds cannot be used for facilities that have more than sixteen beds.

Without federal funding many treatment providers are unable to provide services to everyone who is in need of treatment. Through the use of these waivers the State of Virginia was able to expand treatment capacity from four residential treatment providers that would accept Medicaid to 71—within a span of a few months (Joseph, 2017).

#### **Baltimore City Stabilization Center**

The city of Baltimore is currently constructing a stabilization center that will serve as a point of intake for people who are in need of substance abuse treatment, including those picked up by the police for public intoxication or overdose. This center is one aspect of Baltimore's goal of providing "treatment on demand" for anyone who needs it. Treatment on demand is a policy that requires that if a patient requests to be treated for their use of substances, they must be immediately entered into a program. The stabilization center is expected to reduce some of the burden on emergency rooms that is created by individuals with substance abuse disorders ([Baltimore City Health Department, n.d.](#)).

#### **Project Echo**

In New York several groups of stakeholders implemented the Western New York Collaborative ECHO for Chronic Pain, Opiate Prescription and Medication Assisted Treatment. In New York, they used the ECHO model to address medical issues related to opioids—prescribing, management of chronic pain patients, screening for addiction, and medically assisted treatment. This use of ECHO may be particularly helpful for providers who would like to prescribe naloxone, buprenorphine, or Suboxone as a part of medically assisted treatment (MAT) to patients who are unable, reluctant or unwilling to receive MAT in designated substance abuse treatment centers, perhaps due to the stigma associated with those centers, or perhaps due to lack of treatment availability. Giving more primary care providers the tools and resources to treat opioid addiction disorders has the potential to expand treatment options across the State, and in particular, locations where treatment options are limited, such as Kent or Sussex County.

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Project ECHO (Extension for Community Healthcare Outcomes) was developed in 2003 in New Mexico with a goal of providing specialist knowledge to primary care providers about the treatment of Hepatitis C, so that those living outside of urban areas did not have to rely on specialist care, with long waiting lists and heavy caseloads, for care. ECHO provides a telehealth networking forum for medical practitioners to discuss anonymous current cases, and seek guidance on care. It also provides trainings on various topic areas. The initial program was so successful that it has been implemented in 34 states, as well as globally, for a variety of health conditions. Several foundations provide funding for states to implement Project ECHO, and the federal Expanding Capacity for Health Outcomes (ECHO) Act, passed in 2016, provides resources for additional evaluation and analyses of ECHO programs and other telehealth initiatives of their ability to provide services to under-served health populations.

### *Women and Family Centered Treatment*

#### **Pregnant Women**

MAT is the standard treatment for opioid dependence disorder, in general (the Academies, 2017; Smith Connery, 2015), but also for women who are pregnant and using opioids (Smith & Lipari, 2017). While the use of MAT therapy during pregnancy can result in neonatal abstinence syndrome (NAS), the benefits of the treatment outweigh the risks due to the improved birth outcomes for both the mother and the child (Fischer et al., 2000; H. E. Jones et al., 2008; Smith & Lipari, 2017). Notably, women who receive this treatment should be referred to routine prenatal medical care due to the complicated nature of the treatment. TEDS data shows that pregnant women between the ages of 15 and 44 receive MAT as their treatment therapy at a higher percentage than non-pregnant women of the same age (48.5% versus 23.4%) (Smith & Lipari, 2017).

In 2015, 314 infants were born in Delaware with Neonatal Abstinence Syndrome (NAS) (Albright & Rini, 2016). Over the past few years, Christiana Care Health Systems (CCHS) has worked to respond to the increased incidence of opioid dependent infants. After birth, these babies experience symptoms of withdrawal, which interferes with healthy development, and increases time spent in the hospital after delivery. CCHS has set aside special rooms for these infants and mothers, outside of traditional neonatal intensive care units, in response to research that indicates that these types of facilities improve long-

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term outcomes for both the mother and child, and reduces overall hospital stays (Albright & Rini, 2016). Infants born to mothers who use opioids are also at higher risk of smaller birth weight, birth defects, trouble feeding, developmental delays, future behavioral problems, and Sudden Infant Death Syndrome (DHHS, 2016). As a consequence, some states consider opioid use during pregnancy as a form of child maltreatment, and mothers are penalized for use. However, punitive sanctions against expectant mothers with opioid dependence disorder may mean that many women do not undergo treatment and put themselves, and their babies, at increased risks. Judgmental and critical reception from hospital staff after delivery may also decrease the mother's willingness to adhere to a treatment plan. Women who choose to confront their addiction should be supported in their decision to work towards positive change, and not punished or judged for their addiction (Savin & Paul, 2016).

### **Women with Dependent Children**

About 70% of women who are entering treatment have dependent children (DHHS, 2016). This is significant because it has been found that most drug-using women who have children are less likely to seek treatment in order to avoid separation and the fear of losing child custody (Wilke, Kamata, & Cash, 2005). Therefore, it is unsurprising that treatment facilities that provide integrated treatment services for mothers (those that include services such as child care, prenatal care, parenting programs, or allow children to stay with parents in residential settings) show more success than those that do not (DHSS, 2016; Niccols, et al., 2012). However, only 3.6% of US treatment centers provide these option (SAMHSA, 2015b). Delaware has no generally accessible option for this type of treatment as of yet (SAMHSA, 2015b). The only facility that provides residential treatment services for mothers and their children is an alternative sanctions program, operated by Connections CSP, that allows pregnant women to be redirected to a treatment facility where they can stay for up to 6 months after their child is born, in lieu of incarceration (Nann Burke & Rini, 2015).

### **Policy Considerations Related to the Justice System**

Many people who develop opioid dependence disorder will come into contact with the criminal justice system at some point in their lives. Many states have determined that the criminal justice system can play an important role in screening for addiction, referring to treatment, and even providing treatment. Across the nation, states have responded to the challenges presented by substance use disorders to make significant changes to their criminal justice systems. In many cases, these changes emphasize

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harm reduction, over punitive response to criminal behavior. Most of the initiatives listed below are currently being implemented in Delaware, although, in some cases, with limited reach, and a large potential for expansion.

### *Drug Treatment Courts*

Drug courts provide low-level offenders with the option to complete a structured treatment and case management program, in lieu of incarceration. Participants must report to the Court at scheduled intervals to report on their progress, and work closely with treatment providers, probation officers, and other stakeholders to follow their treatment plan, and meet supervision requirements. Florida opened the first drug court in the United State in 1989; within ten years, the majority of all states had implemented drug courts. In 1997, Delaware became the first state in the nation to have a statewide drug court. The Delaware Drug Court has had significant success; participants in the court have lower recidivism rates compared to those who do not participate in the program (Delaware Superior Court, n.d.). National research has consistently shown that drug courts significantly reduce recidivism, substance abuse, crime, and criminal justice costs (Mitchell, Wilson, Eggeres, & MacKenzie, 2011). In response to the success of the drug court model, additional problem-solving courts have been created to address the needs of other populations with distinct needs, including mental health courts, veteran's courts, domestic violence courts, and more.

### *Family Drug Treatment Courts*

Family drug treatment courts are set up to intervene with families that are involved with the child welfare system, when one or both of the parents or guardians have a substance use disorder. Reunification with their children is predicated on their ability to complete the treatment program under court supervision. Wrap-around case management, similar to that of standard drug courts, is central to the program. Several studies have found that parents who complete the program are more likely to be reunified with their children, and children spend less time in foster care, than families who go through traditional court systems (see: Gifford, Eldred, Vernerey, & Sloan, 2014 for one review).

### *Law Enforcement Assisted Diversion (LEAD)*

LEAD is a diversion program currently operated by police departments in ten jurisdictions throughout the US, with programs under development in several others. Police officers in these programs can use their discretion to divert low-level offenders to treatment instead of arresting them. Police departments continue to work with partnering organizations to monitor the offender's participation in programs over

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time. A recidivism analysis of the LEAD program in Seattle found significant reductions in both short term and long term recidivism for participants compared to a comparison group of offender that went through the typical law enforcement protocol (Collins, Lonczak, & Clifasefi, 2015).

While Delaware does not have an official LEAD program, two local programs offer similar services. The Dover Police Department started the Angel Program in 2016, modeled after a program of the same name in Massachusetts. New Castle County Police created the Hero Help program in recent years, with similar goals. Both programs allow low level offenders to ask police departments for help in accessing treatment, with no threat of legal sanctions. Additionally, police officers can divert offenders to treatment, in lieu of arrest, in cases of possession of small amounts of substances.

### *Treatment in Prison*

The National Institute of Drug Abuse notes that about a half of prisoners currently incarcerated in state and federal prisons have substance use disorders (NIDA, n.d.). According to the Delaware Department of Correction, 49.7 percent of Level V inmates self-report that they have a drug or alcohol problem (DOC, 2016). Given that treatment admissions for heroin and other opioids make up 40% of all admissions in the State, it is likely that the need for opioid dependence disorder treatment is also quite high in the prison population, as well.

Research suggests that MAT should be utilized within correctional facilities in order to reduce use, risky injecting behavior, and increase treatment entry and retention post release (Hedrich, Alves, Farrell M., et al., 2012). Eighty-five percent of inmates who received MAT were in treatment post release compared to 15% of those who did not receive MAT. This difference held strong even after 6 months; 50% of those who received MAT continued to be in treatment compared to 5% of those who did not (Hedrich et al., 2012). Women in jail and prison are more likely than men to meet the standard for drug dependence. Female inmates also use opioids at a higher rate (1 in 4 versus 1 in 6) than males (Bronson, Stroop, Zimmer, & Berzofsky, 2007).

### *Prisoner Reentry Programs*

People recently released from prison have a high incidence of mortality associated with drug overdose (Brinkley-Rubinstein, et al., 2017). During their stay in prison or jail, an individual's tolerance for opioids decreases, and using opioids at the dosages previously administered, can lead to deadly overdoses.

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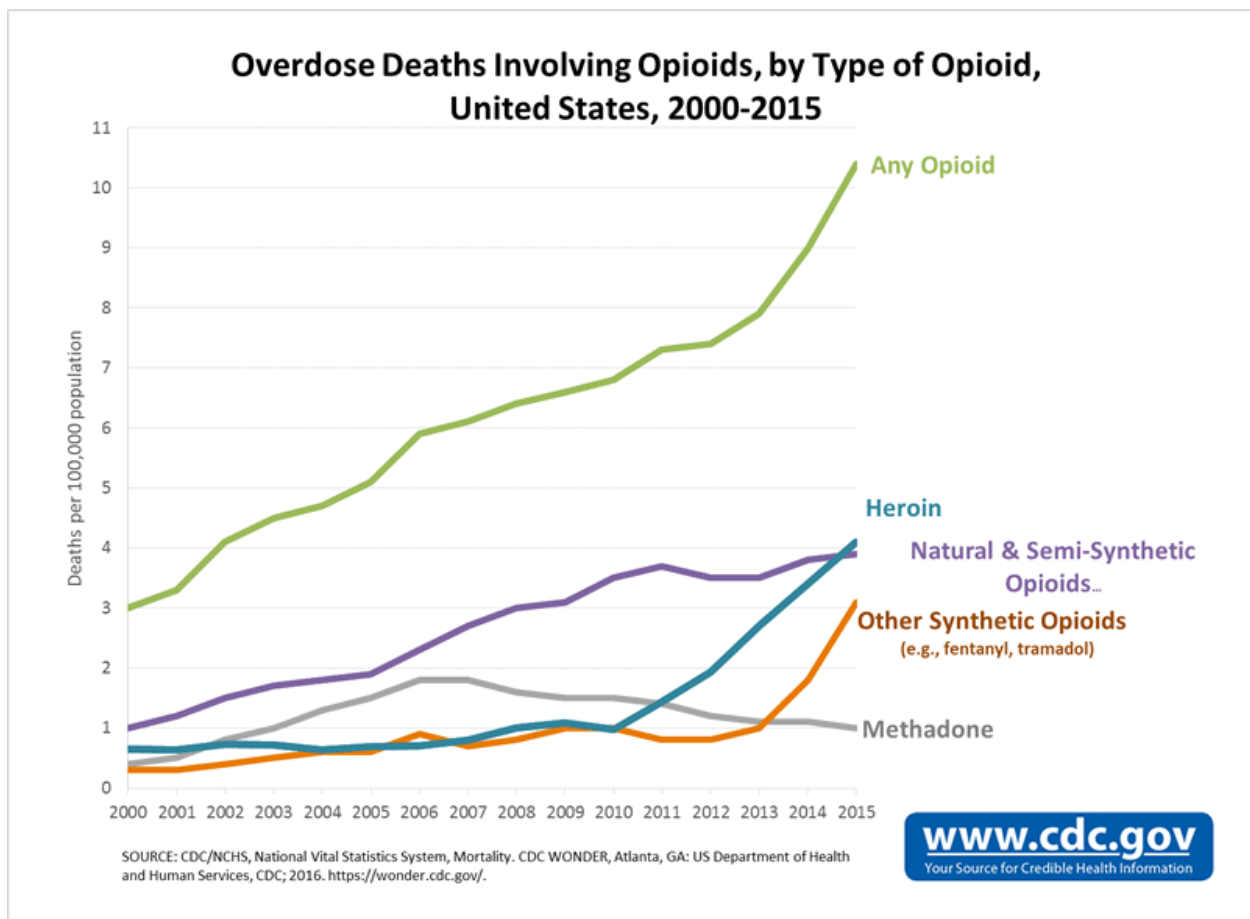


Correctional systems can improve outcomes for inmates by providing education about the risk of overdose, linking prisoners to treatment programs, and providing access to naloxone upon release.

## Policies Related to Harm Reduction

### Overdose Prevention

There were over 300 overdose deaths in Delaware in 2016. (Peikes, 2017). In 2016, fentanyl-related overdoses tripled from the previous year, with 120 confirmed fentanyl-related deaths (Horn, 2017). Delaware’s overall number of drug overdoses increased by 63 percent between 2015 and 2016 (CDC, National Center for Health Statistics, 2016). Overdoses linked to opioids, particularly fentanyl and its analogues, increased nationwide. States have responded to the increased risk of overdose and overdose mortality in a variety of ways, including Naloxone distribution, Good Samaritan laws, and fentanyl alert systems.



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## **Naloxone**

Naloxone, also known by the brand name Narcan, is an opioid antagonist that reverses and blocks the effects of opioids on the nervous and respiratory systems. In the event of an overdose, administration of Naloxone can be used to revive an opioid user. In some cases, when potent opioids, such as fentanyl, are present, multiple administrations may be required. While naloxone has been used for decades to reverse the effects of overdose, attention has lately been drawn to this product because of the sheer amount of lives that are saved as a result of increased availability and access, due to policy changes across the country. In 2016, emergency responders in Delaware administered Naloxone to reverse overdoses 2,334 times, and in the first six months of 2017, Naloxone was administered 866 times (State of Delaware, 2017).

In Delaware, Senate Bill 48, signed into law July 2017, allows for a standing medical order for Naloxone access in Delaware. This law gives any individual who would like to acquire Naloxone the ability to purchase it from participating pharmacies, without an individual prescription, after they participate in a brief training and sign an acknowledgement form. Community trainings, called DOSE (Drug Overdose Survival Education) are conducted monthly by Brandywine Counseling and Community Services. In addition, police departments in Delaware are increasing the numbers of officers trained to use naloxone. School nurses are also being trained in the use of naloxone in Delaware.

## **Drug Overdose Immunity and Good Samaritan Laws**

Currently implemented in Delaware, drug overdose immunity and Good Samaritan laws provide legal immunity for a person when they call for emergency services, in the event of an overdose. Currently, 40 states and the District of Columbia have these laws in place. Delaware was an early adopter of these laws, enacting legislation in 2013.

## **Fentanyl Alerts Systems**

Delaware, like many other states, has issued news releases during periods when fentanyl was linked to overdoses within the State. In addition to alerting users about the existence of fentanyl, states can also use these systems for other synthetic opioids that occasionally appear mixed with common street drugs, or found in pressed pill form, including U-47700 and Carfentanil, which has potency approximately 10,000 times that of morphine and 100 times that of fentanyl. Baltimore recently launched a “Bad Batch” text-alert system that sends alerts to anonymous users who are linked to the text group. The

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text message system also allows information to be disseminated about needle exchange locations, and other harm reduction resources. While text messaging has its limitations, this initiative provides one example of the diverse ways that states and municipalities can get the word out to communities about dangerous levels of synthetic opioids in street drugs.

### *Syringe Exchange*

In 2015, one small community in Indiana received national attention after a sharp increase in the number of people diagnosed with HIV occurred in the region; 181 individuals associated with the outbreak were identified by the CDC in just one year (Peters et al., 2016). The researchers who responded to this crisis in Scott County, Indiana, make clear that many other communities across the United States are at similar risk of outbreaks of infectious disease associated with the use of opioids and the sharing of needles. The implementation of a syringe exchange program within this community quickly stabilized the epidemic.

A recent document submitted to the Centers for Disease Control by the Delaware Division of Public Health notes that communities in Kent and Sussex Counties share similar characteristics of Scott County, Indiana, and without a public health strategy in place, these communities could also see significant increases in the number of people who are diagnosed with HIV due to intravenous drug use. This same document also provides data on the number of people in Delaware with Hepatitis C that are thought to be past or present intravenous drug users. Their analysis suggests that an increasing number of people under the age of 40 are contracting Hepatitis C, most likely through the use of shared needles (Delaware DPH, 2016).

Delaware enacted a pilot needle exchange program in Wilmington in 2006, and legislation allowed the program to increase statewide in 2016. Since 2006, the number of people who contract HIV through the use of intravenous drug use has decreased. However, recent State budget cuts have decreased the funding for this program, and despite intentions to see statewide expansion, Kent and Sussex counties are not receiving the benefits of the syringe exchange program (Delaware DPH, 2016).

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## Conclusion

News reports linked to the opioid epidemic reach us every day—stories of lives that were taken much too soon, families torn apart, and lives ruined by addiction. Yet, there is also another story at work. Many committed advocates, policymakers, researchers, community organizations, and people on the front-line of this disease—emergency responders, police, medical practitioners, and families and citizens that have experienced opioid addiction first hand—have invested countless hours of effort into turning the tide of this epidemic. The initiatives noted in this report are just a sample of the countless efforts that are being made every day to reduce opioid dependence disorder and the harms associated with this public health crisis.

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