DELAWARE DRUG OVERDOSE FATALITY REVIEW COMMISSION ANNUAL REPORT

2023 Annual Report

Overview

The Delaware Drug Overdose Fatality Review Commission (DOFRC) is charged under 16 *Del. C.* § 4799 with reviewing opioid overdose deaths in the State of Delaware. In 2021, there were 515 overdose deaths recorded in the state of Delaware, marking a 15.21% increase from 2020. This report examines a sample of 148 cases of fatal overdoses that occurred in 2021. Sampling was done systematically by reviewing the cases of odd months (e.g., January-01, March-03, etc.) reported on odd days (e.g., 01, 03, 05, etc.) and the cases reported on even days of even months. Case information is collected from law enforcement, local medical and rehabilitation treatment providers, the Delaware Department of Correction, and public health records. Any data on each decedent collected within the last five years is requested from these organizations via subpoena. DOFRC's research team then quantifies all information to provide the analysis found in this report.

Data Collected	Agency
Law Enforcement	Delaware Information and Analysis Center (DIAC)
Corrections	Delaware Department of Correction
Medical	Local Hospitals
Death Notice	Delaware Division of Forensic Science
Death Certificates	Delaware Department of Public Health

This sampling method and the data provided are not without limitations. First, within the systematic sampling above, the Commission's findings are not reflective of all overdose deaths in the state of Delaware. Second, the Commission only had access to data – some of which is self-reported – from the past five years, and thus lacked historical information that could provide more detailed insight into its findings. Third, this data is not comprehensive; the data sources do

not provide a holistic picture of the individual nor a detailed account of their drug use and life course. Despite these limitations, DOFRC is in the top of the nation in its number of cases reviewed and data collection efforts – notably, an *n* of 148 still allows for statistical significance in this sample.

Within this sample, 60.5% of overdose deaths occurred in New Castle County, 21.1% in Kent County, and 18.4% in Sussex County. Throughout 2021, overdose deaths most frequently occurred on weekends (Friday-Sunday) and Wednesdays, with a plurality of the sample's overdose deaths occurring in December (11.5%). Figure 1 (below) demonstrates the distribution of reported cases per day of the week:

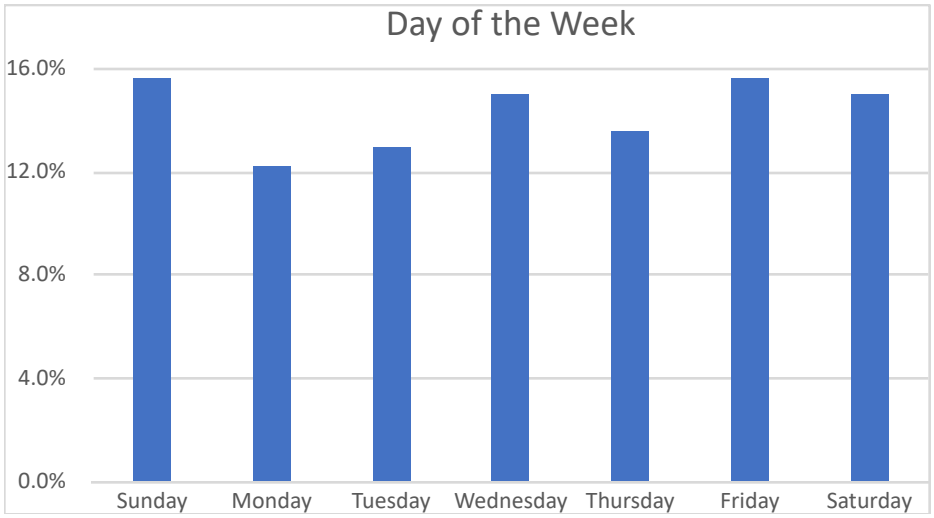

Figure 1: Day when death occurred

39.9% of overdose deaths in the sample occurred within the decedent's residence, while 58.7% occurred outside of the decedent's residence.[1] Fatal overdoses occurring outside of the decedent's residence often happened at an acquaintance's residence/property (15.5%), a family member's residence/property (15.5%), or motels/hotels (10.1%).

[1] Location of death was not determined in 1.4% of cases.

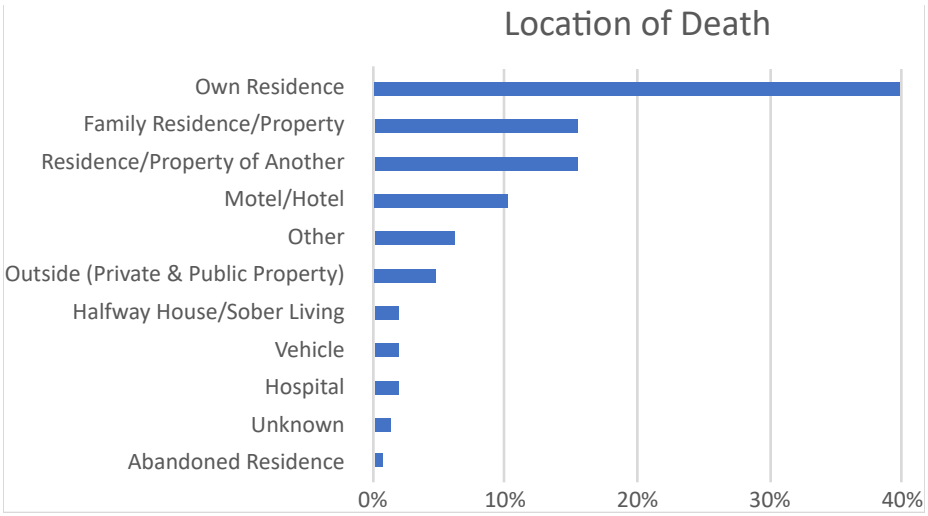

Figure 2: Location of death

Decedent Demographics

The average decedent in our sample was a 42-year-old single white male. Most decedents had a high school diploma, worked in construction/extraction occupations, and had no prior military experience. Most individuals who died from a fatal overdose in 2021 had fentanyl in their system at the time of death (94.6%). Table 1 below outlines demographic data from our sample:

Variable	*Percentage*
Age	
Mean = 42.05	
Sex	
Male	66.9%
Female	33.1%
Race	
White	76%
Black	19.2%

Latino/a	4.1%
Black/Puerto Rican	0.7%
Marital Status	
Single/Never Married	59%
Married	8.6%
Separated	1.4%
Divorced	14.4%
Widowed	2.9%
Missing Data	13.7%
Veteran Status	
Never Served	75%
Previously Active Duty	2.9%
Missing Data	22.1%
Education	
Grade School	4.1%
Some High School	10.1%
GED	0.7%
High School Diploma	45.9%
Some College	4.1%
Associates Degree	1.4%
Bachelor's Degree	2%
Trade School	1.4%
Missing Data	29.7%
Occupation	
Management	2.7%
Business and Financial Operations	2.7%
Educational Instruction and Library	1.4%

Art, Design, Entertainment, Sports, and Media	0.7%
Healthcare – Practitioners and Technical	2%
Healthcare Support	2%
Food Preparation and Serving Related	8.8%
Personal Care and Service	2%
Building/Ground Cleaning and Maintenance	3.4%
Sales and Related	6.1%
Office and Administrative Support	3.4%
Farming, Fishing, and Forestry	1.4%
Construction and Extraction	17.6%
Installation, Maintenance, and Repair	4.7%
Production	0.7%
Transportation and Material Moving	6.1%
Homemaker	0.7%
Disability/Public Service	2%
Unemployed	2%
Missing Data	29.7%

Table 1: Demographic information

Recommendations

We specifically propose the following recommendations to combat the morbidity and mortality of Delaware's opioid crisis. The Commission developed these following recommendations based on an analysis of data collected from death certificates, medical records, legal records, and treatment history.

1. *Fund and support expanded reentry efforts at the Delaware Department of Correction and community partners.*

2. *Create peer-support specialist positions for all Community Correction locations, assist with treatment for failed drug screens, assist in follow up on failed drug screens to navigate treatment options over violation of probation.*

3. *Promote community education for families and outreach services for witnesses to overdoses (both fatal and non-fatal), with high priority given to known drug users.*

4. *Create a coordinated, comprehensive, systemwide effort to address housing insecure, housing unstable, and unhoused individuals in Delaware.*

5. *Broaden efforts in Narcan and fentanyl test strip distribution.*

Recommendation 1: Fund and support expanded reentry efforts at the Delaware Department of Correction and community partners.

A significant portion of decedents in this sample had previous contact with the Department of Correction. Specifically, 38% of decedents for whom complete criminal justice data was available (n=108) were previously incarcerated. Of those who were previously incarcerated, 73.2% were incarcerated for less than one year, and 34.1% were incarcerated for longer than one year.[2] 74.1% of those detained for less than one year were arrested for drug-related offenses; 55.6% of those incarcerated for longer than one year were arrested for drug-related crimes.

Of those incarcerated for less than one year, 26.6% died within three months of their release (3.3% within the first week) and 46.7% died one year or more after their release. Figure 3 below highlights the time between release and death for decedents who were incarcerated for less than one year. On average, those who died within three months of their release lost their lives 41 days after release.

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[2] 7.3% of those previously incarcerated had served separate sentences lasting both less than one year and more than one year.

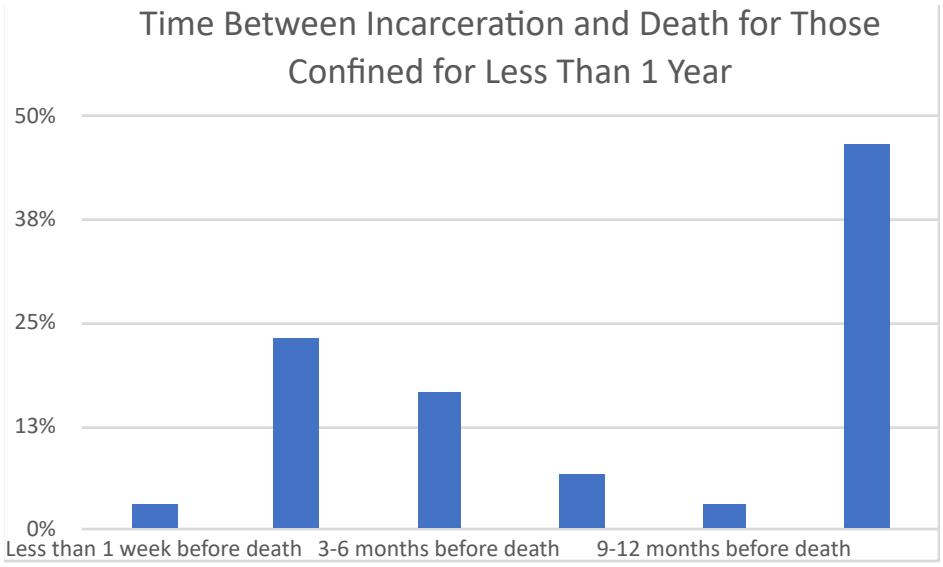

Figure 3: Time between incarceration and death for those confined for less than one year

Of those incarcerated for more than a year, 33.3% died within three months of their release. On average, those who died within three months of their release lost their lives 21 days after release.

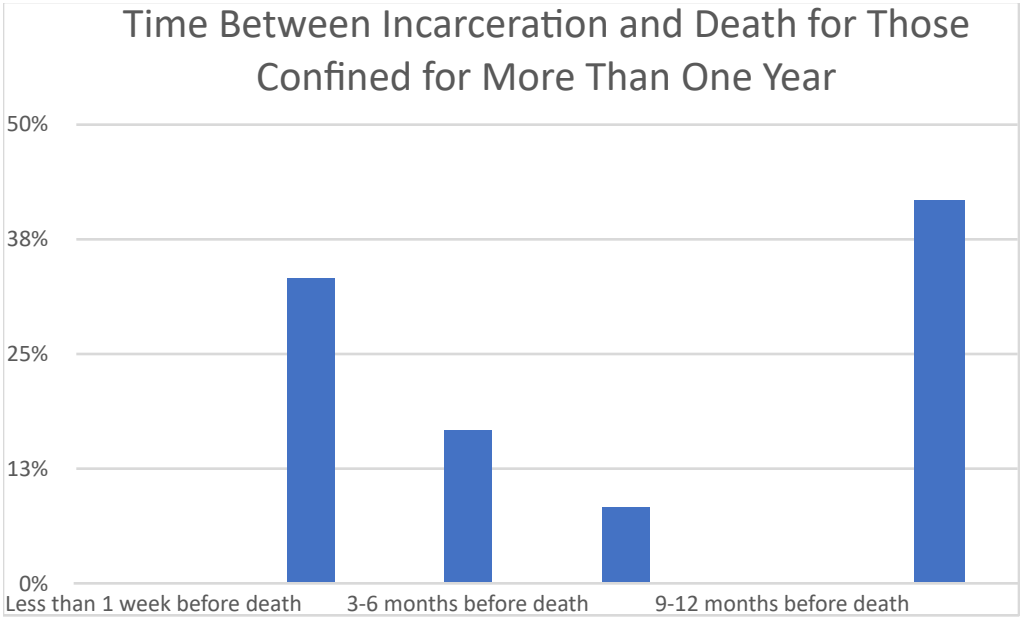

Figure 4: Time between incarceration and death for those confined for more than one year

Given the significant portion of decedents who were previously incarcerated, coupled with the percentage of decedents who died relatively soon after their release, additional funding, and support ought to be provided to the Department of Correction to expand their reentry efforts. Notably, with a significant portion of decedents dying within the first three months of their release, the Commission recommends expanding these services to help reduce the loss of life for this population. Aligning with current research, expanding the programmatic efforts discussed above can occur in two ways: providing additional services for incarcerated individuals, and increasing efforts to support individuals upon release.

Numerous studies continue to demonstrate individuals recently released from jail or prison have a heightened risk of experiencing a fatal overdose (*See,* e.g., Joudrey et al., 2019; Mital et al., 2020; Nosrati et al., 2019). One study in Washington State found that individuals who were previously incarcerated were 129 times more likely to experience a fatal overdose (Binswanger et al., 2007). Similarly, a study of North Carolina prisons found that formerly incarcerated individuals were 40 times more likely to die from an opioid overdose during the two weeks following release (Ranapurwala et al., 2018). Additionally, the same authors found that in 2016-2018, the likelihood increased to formally incarcerated individuals were 50.3 times more likely to die from an opioid overdose during the two weeks following release (Ranapurwala et al., 2022). In identifying determinates that contribute to the heightened risk of an opioid-related death post-release, Joudrey et al. (2019) found that trauma, returning to solitary opioid use, interruptions to medical care, poverty, and decreased tolerance were some of the contributing factors. The authors continue to propose the following suggestions: expanding access to MOUD in prisons and jails while expanding the continuum of care post-release and expanding access to

naloxone upon release. We agree with both efforts. In fact, in the DOFRC's 2019 Annual Report, we recommended that naloxone should be made available to all inmates upon release. This recommendation has since been put into place by the Delaware Department of Correction. The DOFRC, in that same report, recommended that MOUD be available within the prisons, and the Department of Correction has since implemented that recommendation within all their facilities as well. In the spirit of these recommendations, we argue that the linkage to treatment options focused on a holistic continuum of care upon release, including – but not limited to – residential treatment, outpatient counseling service, transitional housing, and harm-reduction services, be supported by the state via continued and additional funding.

Recommendation 2: Create peer-support specialist positions for all Community Correction locations.

Many decedents in the sample had a history of contact with law enforcement officers. Specifically, 41.7% had a reported history of arrest. At the time of death, 11.1% were under the supervision of community correction – 10.4% were on probation, and 0.9% were on parole. We believe that implementing peer-support specialists across all community correction services in the state may help provide necessary services to people who use drugs. Morrison et al. (2023) demonstrate that probationers and parolees report opioid misuse at a rate four times higher than the general population. Roughly 30% of individuals under community supervision nationwide have a substance use disorder (Widra & Jones, 2023). Research continues to highlight problems of probation and parole as practiced in their current form (e.g., Phelps, 2020; Schiraldi, 2023; Wang, 2023), particularly for individuals with substance use disorder (Galvin et al., 2022).

Increased caseloads that have been a consequence of prohibitionist policies and the War on Drugs (Alexander, 2010; Phelps, 2020) have limited the resources and support that can be provided to individuals on probation/parole (DeMichele & Payne, 2007). Peer-support specialists situated within community corrections may serve two purposes. First, it may help alleviate the caseload burden experienced by probation and parole officers to better serve the needs of clients with substance use disorder. Second, peer-support services show some efficacy in providing support for individuals with substance use disorder (Laudet & Humphreys, 2013; Tracy & Wallace, 2016). We recommend that additional funding and support be provided to community corrections to incorporate peer-support specialists. Additionally, we argue that additional treatment support ought to be offered to individuals who fail a drug test while on probation and parole.

A. Provide treatment options for clients who have failed drug screens and provide services to assist clients in navigating treatment options.

Of decedents who were previously under community supervision, 51.9% received a violation of probation/parole (VOP) for a positive drug test. The average number of positive drug tests for those on probation/parole in our sample was 2.29. Additionally, of those who were previously under community supervision, 43.3% received a VOP for substance use-related infractions. Studies have shown that the recovery of SUD is often a process that consists of multiple relapses before long-term sobriety is obtained (DiClemente & Crisafulli, 2022; Kelly et al., 2019; Scott et al., 2005). A VOP commonly results in probationers and parolees receiving increased sanctions, such as increased supervision or incarceration. Alternatively, we would suggest that this be used as an opportunity to provide treatment and support for probationers/

parolees with SUD. However, we acknowledge the currently limited resources available for probation and parole officers. Thus, we believe providing the additional support and personnel of peer support specialists will help to achieve this goal. Additionally, peer support specialists can serve a supportive role in assisting clients to navigate various treatment options that may best be suited for those individual's needs (e.g., inpatient, outpatient, MOUD, sober living, etc.). Given the harms of incarceration for individuals with SUD detailed above, we recommend that treatment be prioritized and supported – failed drug screens and drug-related VOPs would thus be viewed as an opportunity to provide support.

Recommendation 3: Community education for families

Loved ones' substance use directly impacts families. Research conducted in Delaware on family and friends who have lost a loved one to an overdose has demonstrated that navigating the process of finding help for their loved one can be a complex process (Stout, 2022). Feigelman et al. (2020) further highlight the distress parents experience as their children progress further into their drug use and the high financial impact this use has on the family. Additionally, support services in Delaware are limited for those bereaved by a drug overdose death (Stout, 2022; Stout & Fleury-Steiner, 2023, 2024). We recommend that services be created to provide community education programs for families to help them better understand SUD and how to navigate treatment services when seeking help for their loved ones.

Notably, within our sample, 24.4% of decedents were discovered by a family member (16.5% by parents). Furthermore, 15.5% of decedents lived with family members at the time of death. Comprehensive community education programs can serve as a potential prevention point.

We recommend that these programs focus on the following elements: a) education on substance use disorder; b) naloxone training; c) a comprehensive overview of programmatic options for treatment in Delaware, and guidance on how to navigate seeking and securing treatment for both insured and uninsured individuals; and d) training to help support both people who use drugs and individuals in recovery.

Outreach services for witnesses to overdoses (both fatal and non-fatal) with high priority given to known drug users

As mentioned at the start of this section, service in Delaware has been limited for friends and families bereaved by a drug-related death (Stout, 2022; Stout & Fleury-Steiner, 2023, 2024). The authors of these studies pointedly highlight how the stigma surrounding substance use disorder uniquely impacts the bereaved, part of which is demonstrated by the shortage of services available to support them in their bereavement journey. Importantly, this study demonstrated the impacts this has on both family *and* friends of the deceased and outlined that support for the bereaved ought to be a multifaceted approach (Stout & Fleury-Steiner, 2024). Additionally, witnessing an overdose – whether fatal or nonfatal – can serve as a traumatic experience for the witness (Nolte et al., 2022; Song et al., 2023). For every fatality, there is also someone who discovers the body and is traumatized by the experience. Furthermore, 6.9% of fatal overdoses in our sample were directly witnessed by someone.[3] It is also important to highlight that 1.8% of decedents in our sample had also witnessed an overdose at some point

[3] Given that this data is collected from police reports taken during the death investigation, this figure is likely a significant undercount of how many deaths were directly witnessed.

prior to their own death. One study indicated that 84% of people who use drugs in their sample (n = 589) witnessed an overdose.

As discussed in our previous reports, there is a robust body of literature demonstrating that trauma significantly increases the likelihood of substance use (e.g., Khoury et al., 2010; Maël & Daniel, 2022; Morgan, 2009; Norman et al., 2017; Ouimette & Brown, 2003). Given this link and the prior research above indicating that 84% of people who use drugs experience the traumatic event of witnessing an overdose, providing services in the aftermath of these traumatic events may serve as a potential point of intervention. Specifically, we suggest that outreach services be offered to anyone who witnesses an overdose (whether fatal or nonfatal), with a high priority given to people who use drugs.

These programmatic efforts are essential on three fronts: first, they may serve as avenues to connecting family members to the educational services discussed above. Second, they could assist in connecting to support services those bereaved by a drug overdose death. Third, this approach may serve as a crucial intervention point to provide services to people who use drugs – both as outreach support to help mitigate the harms of the trauma endured from witnessing an overdose and as a potential touchpoint for treatment recommendations.

Recommendation 4: Create a coordinated, comprehensive, systemwide effort to assist housing insecure, housing instable, and unhoused individuals in Delaware

For this report, housing-insecure individuals are defined as any individuals age 25 or older with no identified residence. Following these parameters, 48.3% of decedents in our sample were identified as housing insecure/unstable. Point-in-time counts for homelessness in

Delaware conducted by Housing Alliance Delaware have indicated that homelessness has doubled between 2020 and 2022 (Housing Alliance Delaware, 2022). Homelessness in Delaware has reached unprecedented levels (Metraux & Peuquet, 2023). Investigating this increase, Metraux & Puequet (2023) suggest a coordinated statewide effort, lamenting that there have not been unified policy efforts in recent years, regulating addressing this problem to only local-level efforts. We echo the author's suggestion to create a coordinated, comprehensive, systemwide effort to assist housing insecure, housing unstable, and unhoused individuals in Delaware.

A. More robust and flexible funding support for housing the unhoused in active addiction using the housing first model

A section from our previous report released in 2021 bears repeating:

> *Prior research has noted the direct links between unstable housing and SUD (e.g., Bourgios, 2011; Schütz, 2016), signifying two approaches to helping this unique population: Housing First (HF) models and Treatment First (TF) models. HF models focus on providing unstably housed individuals with safe and secure housing first and foremost, without tying residency to abstinence requirements, while TF models only provide individuals with housing if they maintain total abstinence and meet certain program requirements. Multiple studies have highlighted the efficacy of HF models, including demonstrably higher levels of long-term recovery than TF models (Baxter et al., 2019; Padgett et al., 2011; Kirst et al., 2014; Tsemberis, 2011; Urbanoski et al., 2017; Wittman, Polcin & Sheridan, 2017; Woodhall-Melnik & Dunn, 2015).*

Despite this recommendation and its empirical support, there remains significant restraint across the state to support HF treatment models, favoring TF models. We encourage more evidenced-based practices for addressing housing insecurity and, in turn, SUD treatment. Aside from providing the empirical support of HF models above, briefly reviewing psychologist Abraham Maslow's seminal work *A Theory of Human Motivation* (1943) is instructive here.

Maslow outlines a sequential order in which human needs and motivations generally move, beginning with physiological needs, followed by safety, belonging and love, social needs/esteem, self-actualization, and transcendence. We bring attention to this framework, which is foundational in the HF model in that human beings cannot reach self-actualization and transcendence unless all their other needs are first met.

In the context of substance use disorder, self-actualization and transcendence can readily be seen as the courageous act of engaging in the personal growth required to achieve sobriety; That is to say that, physiological necessities (food, shelter, etc.) form the *base* of human needs; if those needs are unmet, self-actualization and transcendence (i.e. growth and sobriety) are very difficult to attain. TF models thus often place the cart before the horse. We challenge the pervasive and pernicious posture of various stakeholders that abstinence should be a prerequisite for housing. That view runs counter to human growth and development – and indeed to the lived experience of those who have struggled with recovery. Thus, we recommend – again – that the state prioritize more robust and flexible funding support for housing the unhoused in active addiction using the Housing First model.

Our findings highlight that housing inequality is disproportionately concentrated in Sussex County. Specifically, 55.6% of decedents in Sussex County were identified as housing insecure/unstable, compared to 47.2% in New Castle County and 46.7% in Kent County. Given this data, the Commission's recommendations should be especially prioritized in Sussex County. Additionally, the expansion of programs like those funded under the *Project for Assistance in Transition from Homelessness* (PATH) program in this region may prove to be beneficial in helping unhoused individuals connect to statewide resources.

The PATH Formula Grant is administered by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Mental Health Services. Its purpose is to support outreach and supportive service activities to persons diagnosed with a severe mental illness (including persons with a co-occurring substance use disorder) who are experiencing homelessness or at imminent risk of homelessness. The PATH program was initially authorized as Section 521 of the Public Health Service Act (42 U.S.C. 290cc-21) established by the Stewart B. McKinney Homeless Assistance Amendments Act of 1990 (P.L. 101-645) and was most recently re-authorized through the Consolidated Appropriations Act, 2023 (P.L. 117-328). Each year, Delaware receives a federal allocation of $300,000 and contributes a mandatory state match of $100,000. These funds support street outreach and in-reach supportive service activities statewide to persons diagnosed with a severe mental illness, including those with co-occurring substance use disorders, who are experiencing, or are at imminent risk of experiencing, homelessness . Service provision includes, at minimum, identifying individuals in need, diagnostic screening, developing rapport, offering support while assisting with immediate and basic needs, and referral to appropriate resources. Street outreach refers to face-to-face interaction with persons experiencing homelessness in streets, wooded areas, under bridges, and other nontraditional settings. In-reach involves face-to-face interactions at service sites frequented by persons experiencing or at risk of homelessness, such as emergency shelters, libraries, peer recovery centers, community resource centers, behavioral health treatment providers, and hospitals.

The state's current PATH partners include Horizon House, Brandywine Counseling and Community Services, and Recovery Innovations. Six hundred seventy-five unduplicated clients

received PATH services in the past grant year (09/01/2022 - 08/31/2023). Of the 675 persons served, 263 were enrolled through street outreach and 412 through supportive service activities. These clients received diagnostic screening, case management, and referrals, including but not limited to temporary and permanent housing placement, substance use treatment, mental health treatment, personalized social service resources, physical health appointments, and healthcare insurance access. Expanding the PATH model will help meet our suggestion to create a coordinated, comprehensive, systemwide effort to assist housing insecure, housing unstable, and unhoused individuals in Delaware. Coupled with an expansion of HF models throughout the state, this can create comprehensive and coordinated statewide efforts to bolster services for this vulnerable population.

Recommendation 5: Broaden efforts in naloxone and fentanyl test strip distribution.

Naloxone has continued to be one of the greatest tools available in combating overdose deaths (Chimbar & Moleta, 2018; Naumann et al., 2019). However, in our sample, only 8.3% of decedents were reported as having naloxone available on scene at the time of death, and only 7.5% were reported as having a history of naloxone in their house/possession. The Division of Substance Abuse and Mental Health (DSAMH) and multiple local organizations have significantly expanded availability of naloxone throughout the state in recent years. While we recognize this work, we recommend a broader expansion of access to naloxone. Our recommendations below highlight potential ways these services may be broadened.

First, we recommend additional support and funding for DSAMH to place naloxone in high-need areas. At present, DSAMH has begun targeting motels as essential naloxone

distribution sites – we recommend that this be expanded to other high-need areas, such as gas stations, DART busses, and liquor stores. This could be accomplished by installing NaloxBoxes – or similar products – in these areas. NaloxBox serves as a "box on a wall," similar to a first aid kit, AED, or fire extinguisher, that may be placed in public settings. Within the NaloxBox is a dose of naloxone, coupled with a brief instructional video on how to distribute naloxone that begins playing as soon as the box is opened. Since its inception in Rhode Island, the program's success has expanded to other states, including the OneBox in West Virginia. NaloxBox allows businesses and institutions to easily store naloxone in spaces that are accessible in an overdose emergency. To promote access to naloxone and continue efforts to destigmatize life-saving harm reduction measures, we recommend that Delaware incorporates a similar program in our state.

Second, and finally, we recommend the expansion of services that place naloxone into the hands of people who use drugs. In our sample, 36.6% of decedents had a recorded nonfatal overdose. Of those with an overdose history, 43.2% experienced a nonfatal overdose less than three months before their death. Providing individuals with naloxone following these events as they are discharged from medical services may help reduce the number of fatal overdoses. Additionally, providing users with fentanyl test strips upon discharge is the best time for users to receive this form of harm-reduction – all hospitals in Delaware are DSAMH naloxone partners and can distribute the kits to individuals without a prescription. Efforts should be bolstered to ensure that hospitals are consistently providing these kits upon discharge. People who use drugs have noted fentanyl test strips as an essential form of harm reduction to decrease fatal overdoses (Reed et al., 2022a, 2022b).

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Delaware Drug Overdose Fatality Review Commission Contact

Julia Lawes, MS., Executive Director

Julia.Lawes@delaware.gov

302-577-8901

Delaware Drug Overdose Fatality Review Commission Members

- Erin Booker, CCHS, Chair, New Castle County Regional Review Team Chair
- Joanna Champney, MS., Director, Division of Substance Abuse and Mental Health
- Dr. Rebecca Walker, Deputy Director, DPH, Director Clinical & Science Operations
- Kathleen Jennings, Delaware Attorney General
- Rebecca King, MSN, RN, Delaware Nurses Association Representative
- Chief Ken McLaughlin, Ocean View PD, Police Chiefs of Delaware Representative
- Lt. Sakinah Slayton, New Castle County PD, Fraternal Order of Police Representative
- Michael Duffy, Exe. Director, Limen Recovery & Wellness, Non-Profit Representative
- Lt. David Hake, DSP, DIAC, Safety and Homeland Security Representative
- Paul Shavack, Chief of Staff, Delaware Department of Correction
- Dr. Manonmani Antony, Medical Society Representative

Report compiled and written by Delaware OFR staff Julia Lawes, Dr. Joshua Stout, and Mary McGee