DELAWARE DRUG OVERDOSE FATALITY REVIEW COMMISSION

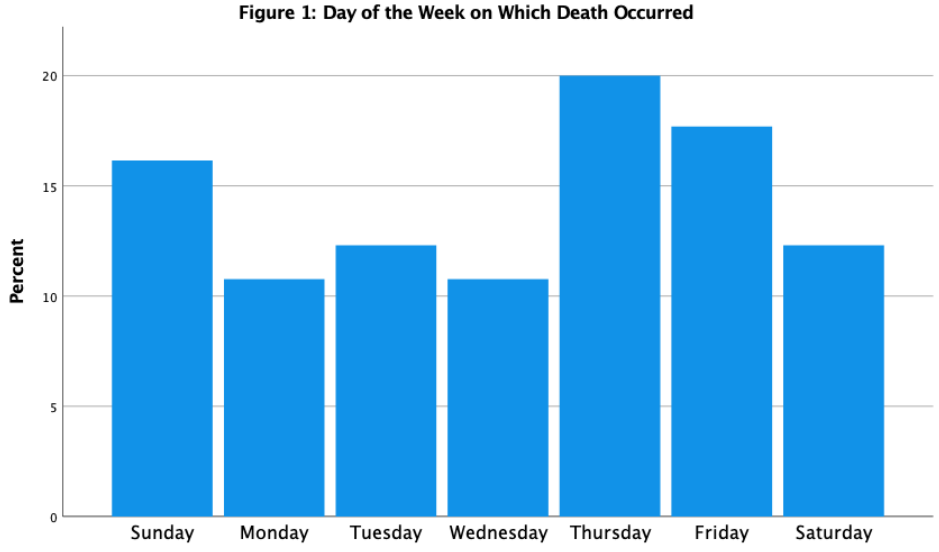
2020 Annual Report

2020 DOFRC Annual Report

Overview

The Delaware Drug Overdose Fatality Review Commission (DOFRC) is charged under Delaware Code Title 16, § 4799, to review opioid overdose deaths in the State of Delaware. In 2019, there were 431 overdose deaths recorded in the state of Delaware. This report examines a sample of 130 of cases from fatal overdoses that occurred in 2019. Sampling criteria were 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. This systematic sample highlights that 51.2% of overdose deaths occurred in New Castle County, 19.7% in Kent County, and 29.1% in Sussex County. Figure 1 (below) demonstrates the distribution of cases per day of the week, highlighting that Thursday, Friday, and Sunday showed more cases than other days of the week

Figure 1: Day of the Week on Which Death Occurred



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The average demographic of decedents within our sample consisted of white, single males who averaged 39.95 years of age (Table 1, below). Precisely, 79.2% of all decedents were male, while the remaining 20.8% were female. Within our sample, 76.9% of decedents were white, 15.4% Black, and 4.6% Latinx, and 3.1% other. While 66.7% were identified as single, 28.2% were married, and 5.1% were divorced at death.

Table 1: Demographic Distributions 2019

	Male (n=103)	Female (n=27)
Race		
White	62.7%	16.7%
Black	11.9%	4.0%
Latinx	4.0%	0.8%
Marital Status		
Single	43.6%	23.1%
Married	17.9%	10.3%
Divorce	5.1%	0.0%
Mean Age	40.32	38.56

We have reached the following recommendations based on our analysis of data collected from death certificates, medical records, legal records, and treatment history through 2019. We specifically propose the following recommendations to combat the morbidity and mortality of Delaware's opioid crises:

1. **Provide safe and secure housing through the empirically-backed Housing First model for unhoused or unstably housed individuals.**
2. **Expand Continuing Education availability for Licensed Clinicians to increase knowledge of Trauma Intervention Services.**

3. **Intervene for those whose contact with law enforcement does not result in arrest or incarceration; and initiate substance abuse treatment services immediately following incarceration for inmates awaiting sentencing.**
4. **Establish a notification system within the Prescription Monitoring Program to ensure prescribers are aware of patient non-fatal overdose(s).**
5. **Improve outreach and follow-up with individuals who engaged in substance abuse related treatment.**

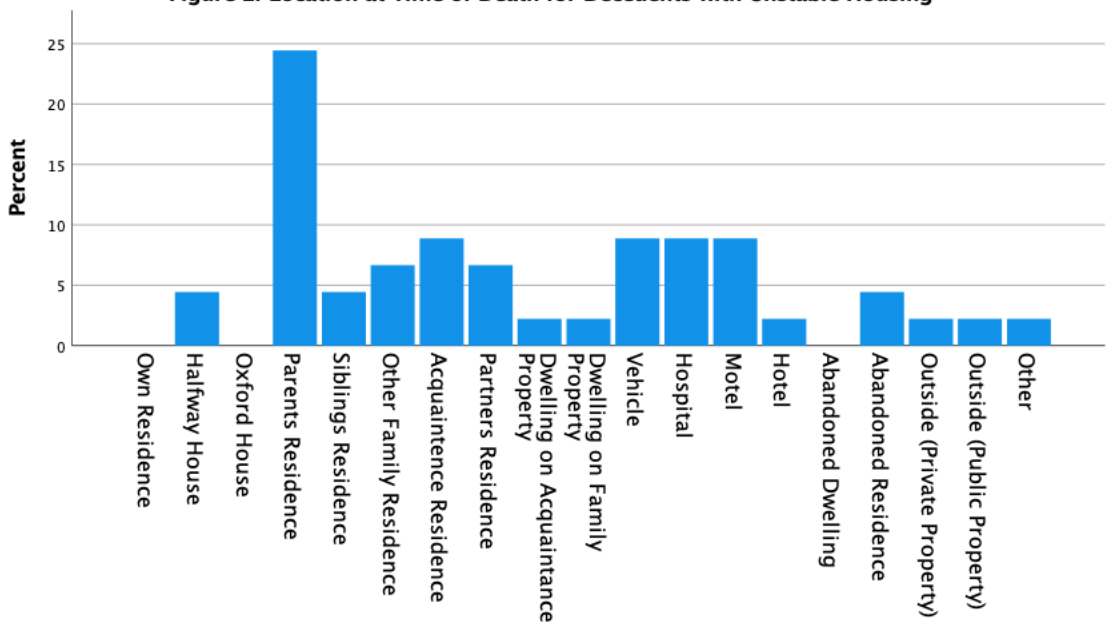
Recommendation 1: Provide safe and secure housing through the empirically-backed Housing First model for unhoused or unstably housed individuals.

Thirty-eight percent of 2019's fatal overdose victims were unhoused or lived with unstable housing. Regarding the location of death, the majority occurred within the decedent's own residence. Our analysis identified 38.1% of decedents in our sample as unhoused or unstably housed.

For purposes of this report, an individual with unstable housing is anyone age 25 or older with no identified residence of their own. Figure 2 (below) shows where decedents with unstable housing were found at the time of death. Specifically, 24.4% were discovered at a parent's residence, 8.9% at a motel, 8.9% in a vehicle, 8.9% at a hospital, and 8.9% at an acquaintance's residence. Given that a plurality of decedents with unstable housing fatally overdosed in a parent's residence, **we propose expanding programs aimed at providing parents with naloxone**. Similar programming has succeeded in

outreach efforts led by DHSS, Delaware's Behavioral Health Consortium's, and nonprofits including atTacK Addiction.

Figure 2: Location at Time of Death for Decedents with Unstable Housing



Our findings highlight significant differences between treatment history for those with stable housing compared to those without. Notably, decedents with unstable housing were more likely to have sought treatment: 42.9% of individuals who had previously sought treatment had stable housing, compared to 57.1% of individuals who did not. A further evaluation highlighted significant differences in what type of treatment individuals with unstable housing accessed. Individuals with unstable housing were significantly more likely to attend outpatient programs, inpatient programs, counseling services, detoxification centers, and sober living programs. Table 2 highlights the treatment accessed by those with stable housing in comparison to those without.

There was no significant difference between groups utilizing psychiatric treatment facilities or long-term treatment facilities. These findings suggest that those with unstable

housing are receiving more treatment than other decedents across the above treatment categories; however, they still represent a significant portion of decedents within our sample. This raises the question of whether these individuals are receiving the proper forms of treatment.

Table 2: Comparison of program treatment history between decedents with stable and unstable housing

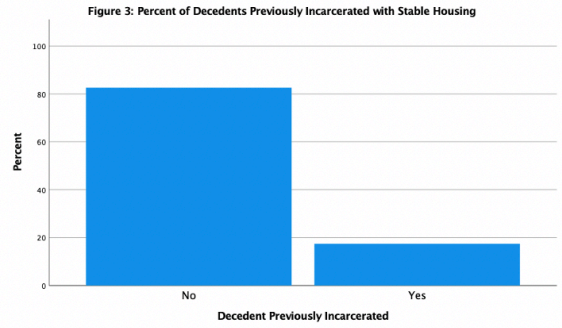
	Percentage of admitted individuals with unstable housing	Percentage of individuals admitted with stable housing
Outpatient	32.5%	13.4%
Inpatient	27.5%	9%
Counseling	17.5%	4.5%
Detoxification	25%	7.5%
Sober Living	12.5%	1.5%

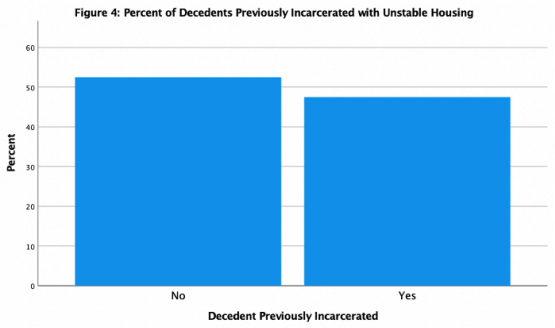
Prior research has noted the direct links between unstable housing and SUD (e.g., Bourgios, 2011; Schütz, 2016), signifying two approaches to helping this unique population: Housing First (HF) models and Treatment First (TF) models. HF models focus on providing unstably housed individuals with safe and secure housing first and foremost, without tying residency to abstienence 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, Tweed, Katikireddi & Thomson, 2019; Padgett, Stanhope, Henwood & Stefancic, 2011; Kirst, Zerger, Misir, Hwang & Stergiopoulos, 2014; Tsemberis, 2011; Urbanoski et al., 2017; Wittman, Polcin & Sheridan, 2017; Woodhall-Melnik & Dunn, 2015).

Based on our findings, we recommend that treatment for SUD-afflicted individuals with unstable housing should prioritize secure housing consistent with the

Housing First model. This model has been implemented in multiple cities, including New York, Philadelphia, and Washington D.C.. We recommend that Delaware follows suit and implements similar programming (e.g., Pathways to Housing).

Decedents with unstable housing were significantly more likely to have previously been incarcerated. As Figures 3 and 4 (below) shows, 47.5% of those with unstable housing were previously incarcerated, compared to 17.4% of those with stable housing. Further, our findings indicated that those identified as unstably housed and who were previously incarcerated were incarcerated significantly more times than those with stable housing. Studies have continued to note the prevalence of "post-release opiate-related overdose mortality [as] the leading cause of death among people released from jails or prisons" (Jourdey, et al., 2019, p. 1). **Given the vulnerability of unstably housed individuals outlined above, we recommend additional services be implemented for individuals with SUD upon reentry**. DOFRC's 2019 Annual Report suggested take-home naloxone and improved access to social services upon release. We continue to echo these suggestions and further suggest that SUD patients with unstable housing be provided resources for both HF and TF housing options.





In sum, we suggest three initiatives in response to the high overdose morbidity and mortality rates among those with unstable housing.

1. **Provide treatment for unstably housed individuals through empirically based Housing First models.**
2. **Target housing resources to individuals with SUD who are released from incarceration in the event that they lack stable housing.**
3. **Support and expand State efforts through existing DHSS and BHC community outreach programs, as well as non-profit programs, to provide naloxone for parents whose child is afflicted with SUD.**

Recommendation 2: Expand Continuing Education availability for Licensed Clinicians to increase knowledge of Trauma Intervention Services.

Multiple studies have noted the impact of trauma throughout the life course[1] of substance use disorder (SUD) (e.g., Morgan, 2009; Norman, Tate & Anderson, 2017; Ouimette & Brown, 2003). Given scholarly support of the links between trauma and SUD, we support further evaluation of trauma's impact on those afflicted by SUD. Specifically, our qualitative analysis found that some decedents' prior contact with police or medical personnel occurred because they witnessed an overdose.

Within our sample, we were able to identify 37.4% of respondents who had experienced trauma. (This is more than likely an underrepresentation, since medical examinations and police intervention do not typically assess for life course trauma.) Of

[1] "Life course" refers in this context to the onset of SUD and the resulting sequence of events.

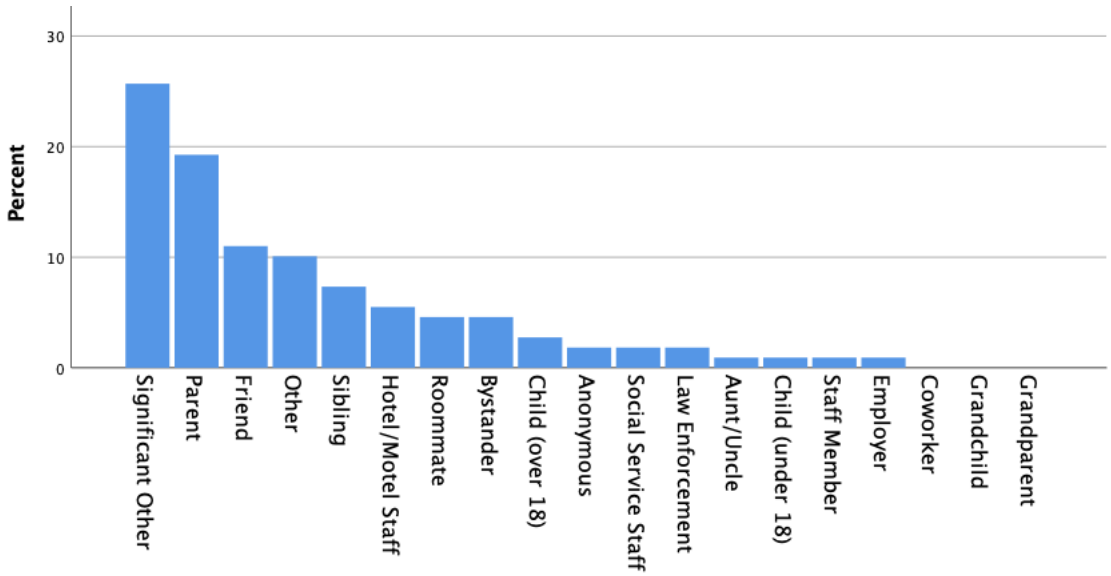
those, **38.1% experienced more than one traumatic event throughout their life course**. Table 3 shows the most common categories of trauma that these individuals experienced. Please note that because many of these individuals have experienced multiple traumas, the figures in Table 3 total to more than 100%.

In our sample, only 8.5% of all decedents had previously received counseling. Given the number of decedents with a history of trauma and their limited exposure to counseling services, we recognize the need to better address the lack of counseling servicees received. We further recommend that treatment providers should have better access to trauma specific training and education in order to expand access to trauma specific counseling services. Further analysis of practicitioners' and treatment providers' current approach to trauma-affected SUD patients can help inform the implementation of trauma-specific approaches in State funded facilities and/or recommendations that facilities hire clinicians certified in trauma specific approaches.

Table 3: Percentage of individuals with identified trauma history, by trauma experienced	
Traumatically affected by a car accident	27.5%
Diagnosis of PTSD	17.5%
Witness to an overdose	15%
Affected by seeing someone die	12.5%
Prolonged exposure to community violence	10%
Traumatically affected by any accident	10%
History of being physically abused	7.5%
Raised in an unsafe environment	7.5%
History of being emotionally abused	5%
Neglected as a child by caregivers	5%
Diagnosis of service-connected PTSD	2.5%
Victim of domestic violence	2.5%
Adversely affected by a natural disaster	0%
History of being mentally abused	0%
History of witnessing familial abuse	0%

We know that losing a loved one to an overdose negatively impacts individuals, regardless of their substance use background. Studies have highlighted the impacts of losing an adult peer or loved one to an overdose (Feigelman, Jordan, McIntosh & Feigelman, 2012; Fleury-Steiner & Stout, 2019; Valentine, Bauld & Walter, 2016). As Fleury-Steiner and Stout have noted, individuals facing this trauma in Delaware often do not have access to, or do not know of, resources for navigating their grief, and experience symptoms of Complicated Grief Disorder at higher levels than those who connect to help-seeking resources. As indicated in Table 3 (above), 15% of those with a documented traumatic experience have witnessed an overdose and 32.5% were affected by someone dying. Trauma was tested across race, gender, and age, showing no significant variation. Resources ought to be provided to family members and friends of the decedent at the time of death to help mitigate this traumatic experience.

Figure 5: Relationship of Individual who Discovered Decedent



As indicated in Figure 5 (above) we observe that 25.7% of decedents were discovered by their significant others, 19.3% by parents, and 11% by friends. These

findings highlight that those closest to the deceased are often the ones who are also emotionally attached to them, indicating that they will experience significant grief (see Feigelman, Jordan, McIntosh & Feigelman, 2012). **Providing these individuals with counseling, peer support, and support group resources at the time of death would assist in mitigating some of the harms experienced from losing a loved one to an overdose**.

An analysis between race and relationship was significant, $X2$ (30, N=109) = 48.6, p = 0.017. White decedents were more likely to be found by the three groups identified above than African American or Lantinx. Of individuals we could determine had contact with law enforcement and criminal history (n=117), 40.2% had drug-related contact with police officers. We define drug-related contact both as an incident directly relating to drug use/possession, as well as crimes frequently associated with – and often committed to support – SUD, such as robbery, burglary, and prostitution (Ball, Shaffer & Nurco, 1983; Hanlon, Nurco, Kinlock & Duszynski, 2009; Potterat et al., 2010).

Cases of drug-related contact with police ranged from one to fourteen instances, highlighting that these contact points offer an opportunity to provide services. Further, of those incarcerated in our sample (n=36), 75% were incarcerated for drug-related crimes. Acknowledging that these particular types of crime are often associated with drug use and drug-seeking behaviors, we argue that officers could use this as a point of intervention to a) provide resources for treatment, and b) utilize this moment for treatment intervention if the defendant expresses a desire to receive help.

Recommendation 3: Intervene for those whose contact with law enforcement does not result in arrest or incarceration; and initiate substance abuse treatment services immediately following incarceration for inmates awaiting sentencing.

Specifically, we suggest that contact with law enforcement for incidents relating to SUD is followed up with contact regarding treatment. An example would be programs similar to New Castle County's **Hero Help** initiative**.** Hero Help is designed to engage people into the appropriate level of SUD care and provides wraparound support – including case management services and, if appropriate, legal advocacy on the part of the police – to those identified as having a SUD when interacting with law enforcement. Services are provided by the Department of Corrections when inmates are sentenced, and offered through community partners when they are released from incarceration. **In order to reduce morbidity and moralitiy rates, we recommend that these services should also be implemented upon detainment.**

Recommendation 4*: *Ensure prescribers are aware of patient non-fatal overdose(s)

After evaluating the Prescription Drug Monitoring Program data for each decedent, we recommend implementing a notification system to ensure prescribers are aware of a patient's history of non-fatal overdose(s). Across decedents, the median number of opiate prescriptions was 7.5 prescriptions. The median quantity of opiates prescribed was 304 pills, and a median supply of 65.5 days. These findings point to a relationship between the decedent and their history of opioid prescriptions. As prior studies have highlighted, a

typical trajectory of heroin use begins with opioid pill abuse (Mars et al., 2014; Fogger, 2014, 2015; Monico & Mitchell, 2018).

We believe that it is imperative to establish a notation within the PMP so that prescribing doctors are aware of a patient's overdose history, or of overdoses that occur while a patient is under the practitioner's care, *prior* to new prescriptions being written. This will allow for an additional intervention touchpoint. **40% of decedents had at least one non-fatal overdose before their passing; some had as many as nine. 58% of decedents had at least one overdose within a year of their death, with 30% of those being within three (3) months.**

Figure 6: Time Between Most Recent Overdose and Death

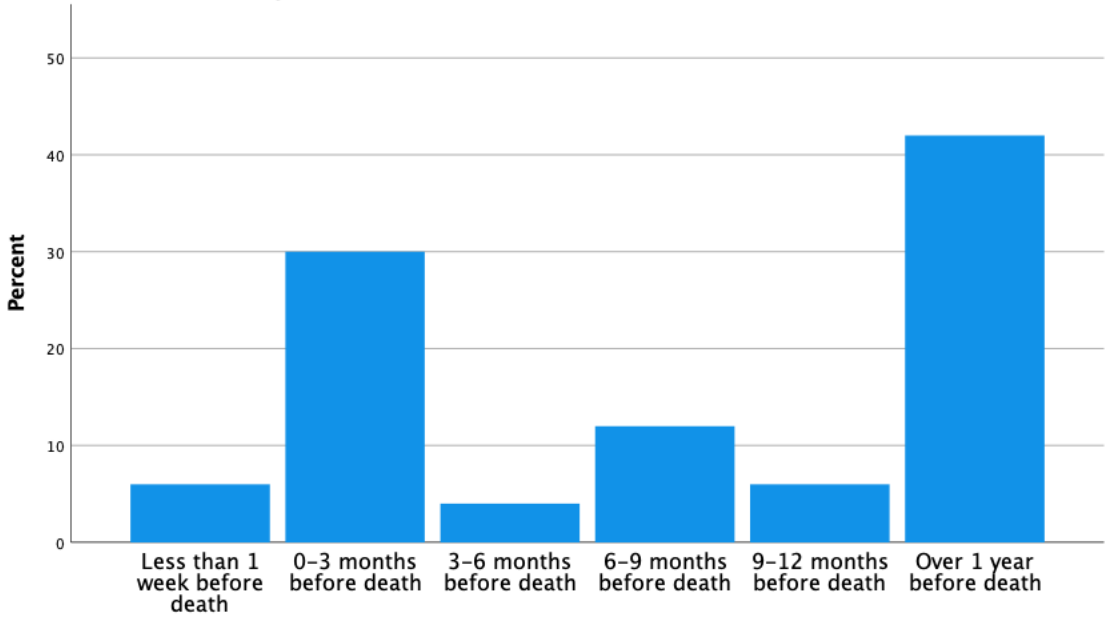


Figure 6 (above) depicts the amount of time that elapsed between a decedent's previous overdose and their death, highlighting that 58% of decedent's most recent overdose occurred less than one year prior to their death, and 42% experienced an overdose more than a year before their death. **Given the varied length of time between a patient's**

fatal overdose and their previous overdose, we believe that practitioners can extend the best model of care to patients when they are informed of an overdose that may occur while a patient is under their care.

Recommendation 5: Improve outreach and follow-up with individuals who engaged in substance abuse related treatment.

As noted above, 40% of decedents had previously experienced non-fatal overdoses and had thus been in contact with health care professionals when receiving subsequent medical care. It was also observed within our sample that 40.7% of all decedents, regardless of overdose history, had previously received treatment for SUD. A chi-square test of independence showed a significant association between a prior overdose and receiving treatment for SUD: specifically, **54% of those who had previously overdosed had also received treatment (Figure 8, below)**.

This relationship highlights that individuals who come into contact with medical professionals as a result of an overdose are more likely to receive further treatment. Further, examining the relationship between SUD treatment history and ER visits for drug use complications (other than an overdose) reveals that those who previously received ER treatment were more likely to attend SUD treatment (Figures 9 & 10). This further supports that touchpoints with medical professionals continue to be an important avenue to provide individuals with treatment resources.

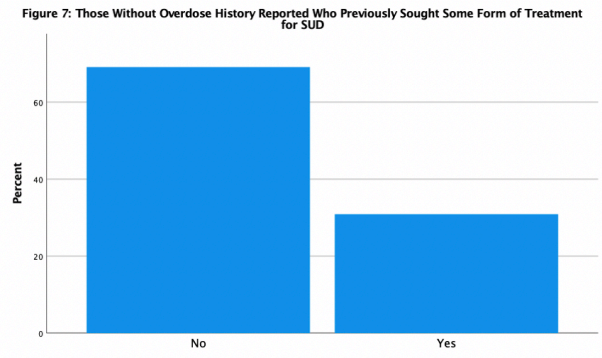


Figure 7: Those Without Overdose History Reported Who Previously Sought Some Form of Treatment for SUD
Percent
0
20
40
60
No
Yes

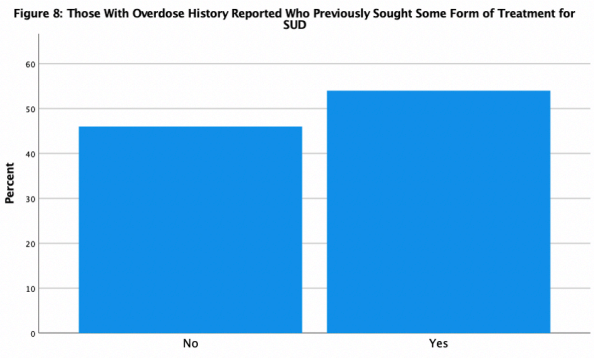


Figure 8: Those With Overdose History Reported Who Previously Sought Some Form of Treatment for SUD
Percent
0
10
20
30
40
50
60
No
Yes

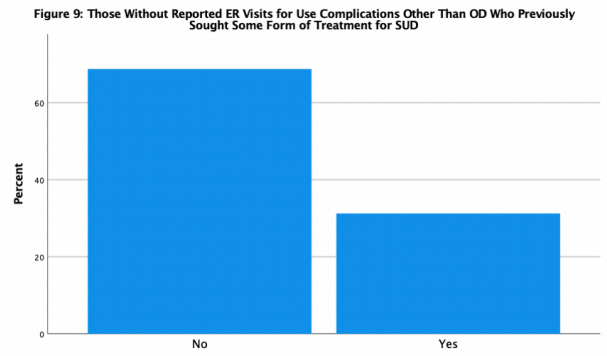


Figure 9: Those Without Reported ER Visits for Use Complications Other Than OD Who Previously Sought Some Form of Treatment for SUD
Percent
0
20
40
60
No
Yes

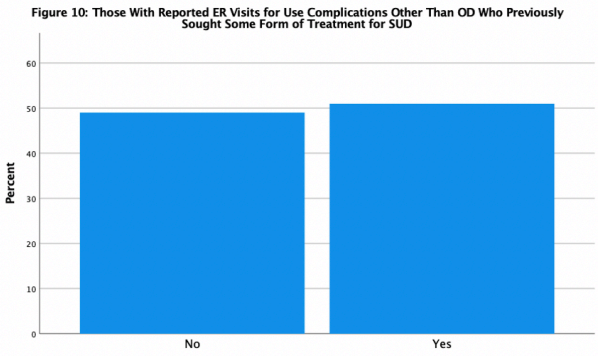


Figure 10: Those With Reported ER Visits for Use Complications Other Than OD Who Previously Sought Some Form of Treatment for SUD
Percent
0
10
20
30
40
50
60
No
Yes

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