



Date: February 28, 2024

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Committee: Senate Finance Hearing

Bill: House Bill 1096 – Overdose and Infectious Disease Prevention Services Program

Position: Support and Request Favorable Report

Submitted by:

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Our organization:

The Brain Injury Association of Maryland (BIAMD) is dedicated to being the voice for those affected by brain injury through advocacy, education, and research. It aims to bring health, hope, and healing to Marylanders living with brain injury, their families, and professionals who serve them by providing leadership and support in resource coordination, prevention, education, advocacy, and self-determination.

Intersection between Substance Use and Brain Injury:

Brain injuries, including those resulting from overdoses, represent a significant public health concern. Substance use disorders can lead to overdoses that deprive the brain of oxygen (hypoxic/anoxic brain injury), resulting in lasting cognitive, physical, and emotional impairments. Peer-reviewed research highlights the correlation between substance abuse, overdose incidents, and the risk of acquiring a brain injury. A study published in the Journal of Neurotrauma underscores the heightened risk of traumatic brain injury in individuals with substance use disorders, suggesting an imperative need for integrated prevention services (Silver, J.M., McAllister, T.W., & Yudofsky, S.C., eds. 2011).

More recent research has shed light on the significant impact that overdose prevention site (OPS) may have on reducing brain injuries within communities, especially those related to drug toxicity events. The Brain Injury Association of America highlights the severe risk of hypoxic (reduced oxygen) and anoxic (no oxygen) brain injuries during nonfatal opioid overdoses, emphasizing that opioids can depress the central nervous system to the point of reducing or stopping breathing. Again, this lack of oxygen can cause extensive damage to the brain, leading to various cognitive and physical impairments. The association between substance misuse and brain injury is strong, with a notable proportion of individuals in rehabilitation for brain injury being there due to drug or alcohol use. Moreover, individuals with a history of

substance misuse are significantly more likely to experience a brain injury, underscoring the intertwined nature of these issues.

Brain Injuries have also been shown to cause increases in risky behaviors, with evidence suggestion “that TBI can increase the risk of engaging in risky substance use behaviors, potentially due to neurological changes associated with the injury. Possible mechanisms include damage-associated neuroplasticity, changes in neuroimmune signaling, and alterations in brain networks that may predispose individuals to substance use post-TBI.” (Olsen CM, Corrigan JD. Does Traumatic Brain Injury Cause Risky Substance Use or Substance Use Disorder? *Biol Psychiatry*. 2022 Mar 1;91(5):421-437. doi: 10.1016/j.biopsych.2021.07.013. Epub 2021 Jul 21. PMID: 34561027; PMCID: PMC8776913.)

OPSs provide a safe environment where individuals can consume pre-obtained drugs under professional supervision, ready to intervene in case of an overdose. These sites not only offer immediate support in emergencies but also connect individuals to a broad range of services, including housing, medical care, and addiction treatment. Research demonstrates that OPSs contribute to reduced overdose deaths, decreased substance use-related harms, and overall mortality among drug users. Furthermore, they have been shown to be cost-effective, improve treatment engagement, and do not contribute to increased drug trafficking or use. (Samuels EA, Bailer DA, Yolken Overdose Crisis. *JAMA Netw Open*. 2022;5(7):e2222153. doi:10.1001/jamanetworkopen.2022.22153)

A study from British Columbia, Canada, supports this need for enhanced screening and support for individuals who have experienced overdoses or “drug toxicity events”. Researchers found that individuals who had experienced a drug toxicity event were over 15 times more likely to suffer a brain injury compared to those who had not. This study underscores the importance of OPS in not only reversing overdose events but also in potentially reducing the incidence of subsequent brain injuries among drug users. The findings suggest a critical need for programs and services that offer person-centered, harm reduction-oriented support for individuals with brain injuries due to drug toxicity, highlighting the necessity for increased awareness, screening, and care for this vulnerable population. (Dane, W., Fahel, D., & Epley, T. (2018, January 2). The Solution to Opioids is Treatment. *THE Challenge!*, 12(1), 4-6. <https://www.biausa.org/public-affairs/public-awareness/challenge-magazine/non-traumatic-brain-injury>).

Looking closer to home, the establishment of OnPoint, New York City’s government sanctioned OPSs represents a pivotal moment in U.S. harm reduction efforts. In its initial months, these centers serviced nearly 6000 visits, significantly impacting the lives of over 600 individuals, many of whom were unhoused and at high risk of overdose. The success of these centers in preventing overdose fatalities and reducing public drug consumption underscores the potential of OPSs to serve as a critical component of a comprehensive strategy to address the overdose crisis. (Samuels EA, Bailer DA, Yolken A. Overdose Prevention Centers: An Essential

Strategy to Address the Overdose Crisis. *JAMA Netw Open*. 2022;5(7):e2222153.
doi:10.1001/jamanetworkopen.2022.22153)

Evidence from over 20 years of OPS operations in countries outside the United States indicates that no one has died of a drug overdose while at an OPS. Research suggests that these facilities are associated with reduced public drug use, lower demand for local healthcare and emergency response services, and no increase in crime. Studies also indicate that OPSs are associated with increased access to substance use disorder treatment. (Khair, S., Eastwood, C.A., Lu, M. *et al*. Supervised consumption site enables cost savings by avoiding emergency services: a cost analysis study. *Harm Reduct J* **19**, 32 (2022). <https://doi.org/10.1186/s12954-022-00609-5>)

Support for House Bill 1096

By establishing Overdose and Infectious Disease Prevention Services Programs, House Bill 1096 addresses a critical component of brain injury prevention for individuals with substance use disorders. These programs not only offer life-saving interventions in the event of an overdose but also connect individuals with vital resources for recovery and rehabilitation, potentially reducing the long-term impact of brain injuries.

Conclusion:

In conclusion, the Brain Injury Association of Maryland supports the passage of House Bill 1096. Through the establishment of Overdose and Infectious Disease Prevention Services Programs, we can take a significant step forward in preventing brain injuries resulting from overdoses, ultimately saving lives and improving outcomes for individuals with substance use disorders. We urge the committee render a favorable report and thank you for your consideration of our testimony.

Resources

1. Silver, J.M., McAllister, T.W., & Yudofsky, S.C., eds. 2011
2. Khair, S., Eastwood, C.A., Lu, M. *et al*. Supervised consumption site enables cost savings by avoiding emergency services: a cost analysis study. *Harm Reduct J* **19**, 32 (2022). <https://doi.org/10.1186/s12954-022-00609-5>
3. Dane, W., Fahel, D., & Epley, T. (2018, January 2). The Solution to Opioids is Treatment. *THE Challenge!*, 12(1), 4-6. <https://www.biausa.org/public-affairs/public-awareness/challenge-magazine/non-traumatic-brain-injury>
4. Olsen CM, Corrigan JD. Does Traumatic Brain Injury Cause Risky Substance Use or Substance Use Disorder? *Biol Psychiatry*. 2022 Mar 1;91(5):421-437. doi: 10.1016/j.biopsych.2021.07.013. Epub 2021 Jul 21. PMID: 34561027; PMCID: PMC8776913.
5. Samuels EA, Bailer DA, Yolken A. Overdose Prevention Centers: An Essential Strategy to Address the Overdose Crisis. *JAMA Netw Open*. 2022;5(7):e2222153. doi:10.1001/jamanetworkopen.2022.22153