State Opioid Response (SOR) Grant Initiatives

Opioid Post Overdose Response: *Strategies and Approaches*

Opioid Response Network

Introduction

The State Opioid Response (SOR) grant is administered by the Substance Abuse and Mental Health Services Administration (SAMHSA) to provide resources to states and territories to address the opioid overdose crisis by supporting the continuum of prevention, treatment, and recovery support services for opioid use disorder (OUD) and other concurrent substance use disorders (SUDs). The SOR program also supports the continuum of care for stimulant misuse and use disorders, including for cocaine and methamphetamine. The grant program aims to help reduce unmet treatment needs and opioid-related overdose deaths across America.

This document describes initiatives that states have implemented with SOR funding to provide crisis and ongoing services to people after a nonfatal opioid overdose.

Purpose and Background

In 2023, 105,007 individuals died from a drug overdose death, resulting in an age-adjusted rate of 31.3 deaths per 100,000 standard population and continuing its position as one of the leading causes of injury death in adults. While the overall age-adjusted rate of drug overdose deaths decreased 4.0% between 2022 and 2023[1], too many people are still experiencing crisis events. The vast majority of deaths, 79,358 in 2023,[2] continue to result from opioids. Most opioid overdoses are **nonfatal**, but the exact percentage varies based on drug potency, access to medical care, and naloxone availability. Studies estimate that **70-85% of opioid overdoses do not result in death**, but they still pose serious health risks-oxygen deprivation and a higher risk of future fatal overdoses (see Figure 1). [5]

One study[3] found that 19.6% of participants who received repeated medical treatment for opioid overdose within one year experienced increased risk of an overdose death. This study by the Centers for Medicare & Medicaid Services (CMS) found that among 137,000 Medicare beneficiaries experiencing a nonfatal overdose in 2020, almost 24,000 (17.4%) experienced a subsequent nonfatal overdose, and about 1,300 (1%) died from overdose in the following year. Another study[4] found that of 4,898 individuals meeting inclusion criteria, 19.6% individuals had repeat opioid overdoses within one year, but only 21.7% of those with repeat events received medication for opioid use disorder (MOUD) at any point

in the year following overdose. For those who received MOUD at any point in follow-up, only 10.5% (112/1065) experienced repeat overdose, versus 22.1% (848/3833) who did not receive MOUD.

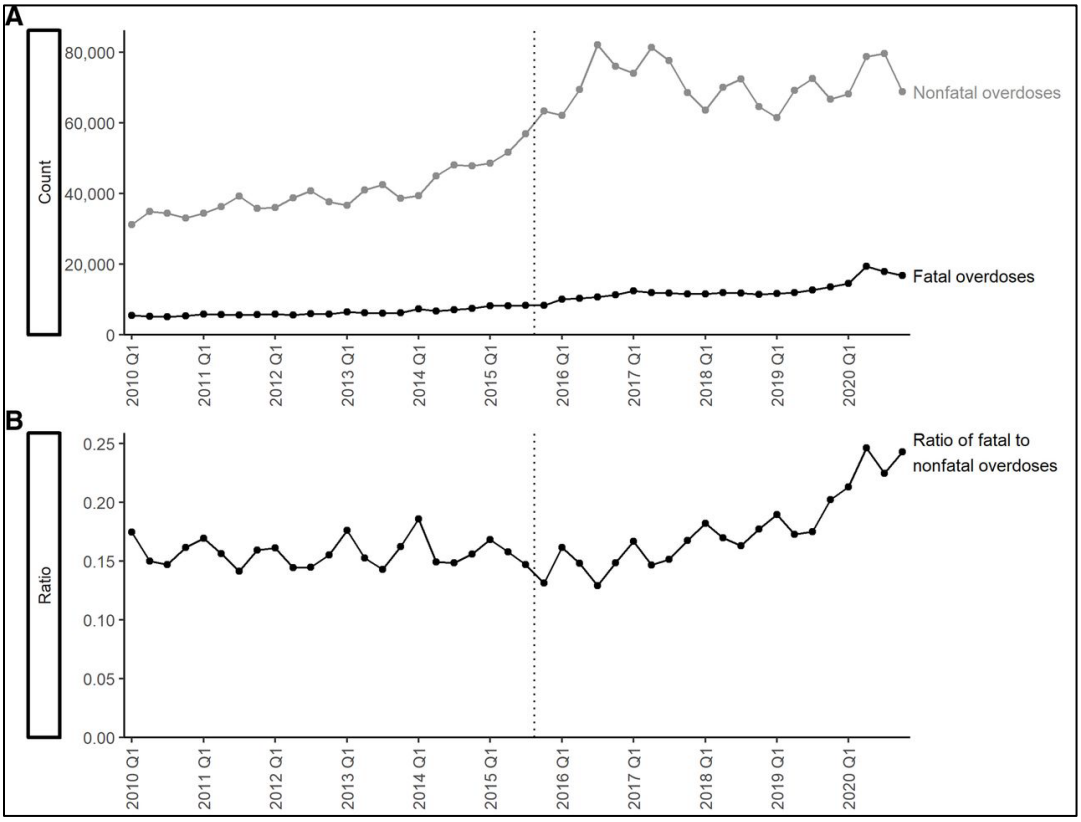


***Figure 1**: (A) Counts of fatal all drug overdoses and non-fatal all drug overdose emergency department visits and (B) ratio of fatal to non-fatal all drug overdoses, by quarter, 2010–2020, USA. The vertical dashed line denotes where coding of non-fatal overdoses changed from ICD-9-CM to ICD-10-CM beginning 1 October 2015. ICD-9-CM, International Classification of Diseases, 9th Revision, Clinical Modification; ICD-10-CM, International Classification of Diseases, 10th Revision, Clinical Modification.*

Understanding factors associated with repeat overdose can aid in optimizing post-overdose interventions.

This brief highlights innovative state strategies designed to address the unique needs of those who have experienced an opioid overdose and are at heightened risk for a subsequent event. While there are many risk factors for an overdose, an OUD plays a role in most events. The programs, strategies, and approaches described in this brief are utilized in various settings taking advantage of different intersection points with people who can benefit from intervention. They demonstrate promising efforts to reduce barriers for people in need of MOUD, reduce the risk of overdose and support long-term recovery.

Common Elements of State Initiatives

Most states are using one or more of the following approaches in developing their post-opioid overdose initiatives.

Data Collection and Tracking

State dashboards provide in-depth analysis surrounding “hotspots,” events, and characteristics of individuals who experienced a non-fatal or fatal opioid overdose. This data is used to drive decisions on appropriate strategies, tailor service delivery, drive prevention efforts and target supports. Prescription Drug Monitoring Programs (PDMPs) and other patient-tracking systems can help identify at-risk people and direct targeted outreach, education, and referrals to treatment programs

Education and Materials Distribution

Training programs educate individuals likely to witness an overdose, including people who use drugs, family members, friends, and community members, on how to recognize an overdose and administer naloxone or other overdose reversal medications. Healthcare providers benefit from training on safe opioid prescribing practices, including proper tapering and disposal of unused medications. Distribution initiatives include educational materials on the dangers of opioids and treatment referral sources, as well as naloxone and detection supplies (i.e., fentanyl test strips).

Engagement of Individuals Post Overdose

Several strategies are being used by states and providers to engage people who have survived an overdose.

1. **Peer Response Teams in Emergency Departments (ED)** engage with overdose survivors and provide a "warm hand-off" to community-based treatment and recovery support services, assisting them in navigating the healthcare system, understanding options, and connecting them with resources like housing and employment. Peers also often continue to engage with people after they leave the ED, providing ongoing support, helping develop recovery plans, and facilitating connections with community resources.
2. **MOUD Initiation in the Community** utilize trained multi-disciplinary Emergency Medical Services (EMS) teams to provide assessments and MOUD where

appropriate. Survivors may experience extreme withdrawal symptoms after a naloxone reversal, creating a critical opportunity to engage them in treatment. Many overdose survivors refuse hospital transport or leave the ED before initiating treatment. Onsite medication initiation helps bridge the gap. Expanding community-based treatment with prescriber capacity provides rapid access to buprenorphine for a vulnerable population that often has limited contact with or access to the healthcare system.

3. **Opioid Response Teams** within law enforcement (police and sheriff departments) conduct home-based outreach with survivors and their social networks following an overdose and work in collaboration with public health providers. The goal
is to engage overdose survivors and their social networks to improve general health, connect people to services (including access to treatment including MOUD), and reduce the risk of subsequent overdose.

4. **Bridge Programs** serve as transitional care models, bridging the gap between acute care settings, like EDs, and SUD treatment programs. These programs, including stabilization centers, support patients during high-risk periods like post overdose and during transitions from inpatient care or ED visits and link them to ongoing care with community providers.

State Examples of Opioid Overdose Response Initiatives

Massachusetts

Massachusetts has established Post-Overdose Support Teams (POST) and funds approximately 11 organizations to offer support services to individuals who have recently experienced a nonfatal overdose and their social support networks. POST offers in-person, home-based, and venue-based outreach and support after an overdose or stimulant-related acute medical event occurs. Community programs receive triggers for service based on data such as police reports, 911 calls for service, emergency medical services (EMS) records, and other data sources tracking overdose events.

The primary goal of POST is to reduce the risk and severity of opioid overdose by utilizing a supportive, informational encounter with individuals who have overdosed and/or their social network. The teams use home-based outreach to provide appropriate services, including naloxone kits, risk reduction planning, referral to SUD treatment/MOUD, as well as recovery, family, and other supports. Many post–overdose outreach models are centered in police departments, but the POST initiative instead directed funding and decision-making to health and human services agencies serving people who use drugs. This approach was based on the desire to:

Implications for Policy & Practice

Post–overdose outreach programs can assist in the identification of hidden populations and individuals who may not already be connected to or known to health and human services agencies to engage these individuals and offer supports and services.

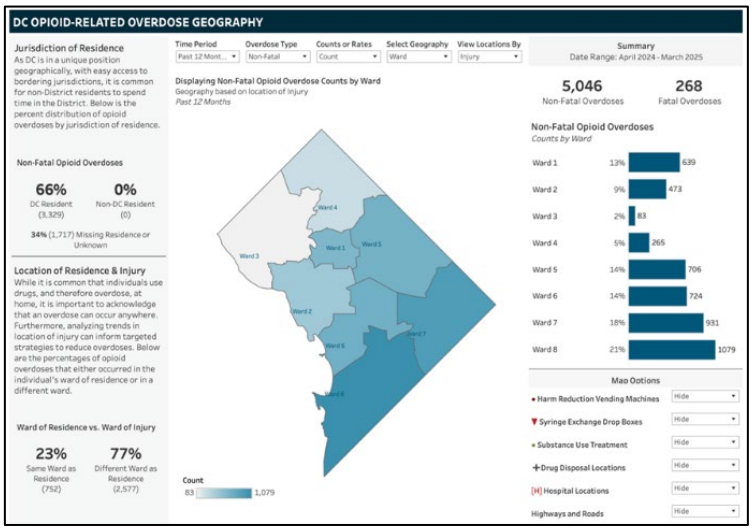
The POST initiative demonstrates the feasibility of embedding post–overdose outreach within existing public health infrastructure as a medical and substance use emergency versus centering post–overdose outreach within criminal legal systems.[6]

- increase receptivity among people who use drugs by minimizing involvement with the criminal legal system in a public health outreach visit;
- support access to, and engagement in, a full range of risk reduction education and resources, including treatment and recovery support options, based on different levels of readiness for change;
- design an approach that would not have a disturbing effect on the bystanders at an overdose to call for emergency assistance,[7,8] and
- enhance engagement with overdose survivors and other individuals not already known to utilize community-based overdose prevention services.

A recent study[6] looked at nine agencies covering 28 municipalities in Massachusetts, all part of the state's overdose education and naloxone distribution network and their POST programs. Findings suggest that the POST initiative is meeting its goal to engage overdose survivors, improve general health, and reduce subsequent overdose risk, while suggesting that future evaluations examine long-term outcomes among participants, including service linkages and incremental behavior change.

District of Columbia

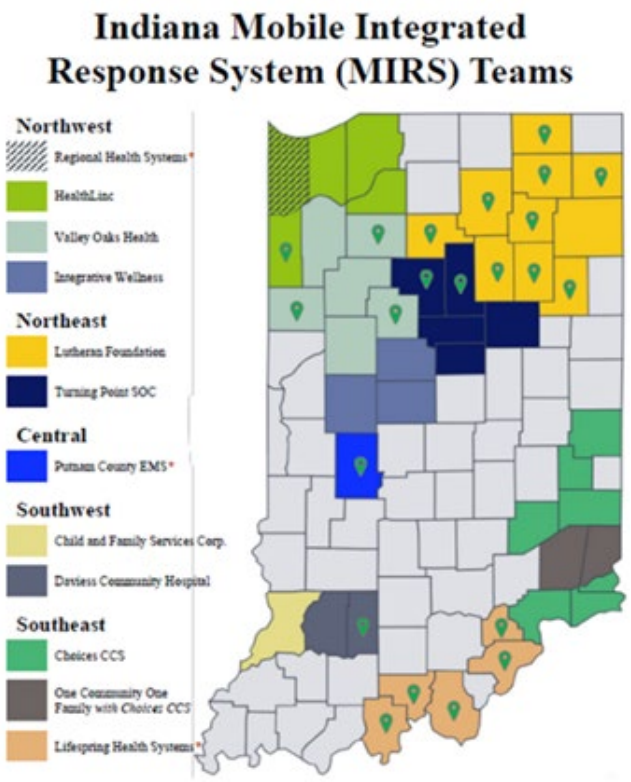
The DC Opioid Overdose Dashboard provides in-depth analysis surrounding "hotspots," events, and characteristics of individuals who experienced a non-fatal or fatal opioid overdose to inform planning and service design in each ward. This ward-level data includes opioid-related overdose counts/rates, ED visits for overdoses, support efforts, demographics and characteristics, history of treatment, time from treatment to fatal overdose, geographic location, and resident counts. The utilization of data has also helped target their placement of social marketing educational and outreach messages.



In addition, the DC Fire and Emergency Services (FEMS) has a post-opioid overdose response system for those who overdose but refuse hospital transport. The data helps them direct where the four community outreach teams need to focus their efforts to connect people to services. The dashboard identified overdose "spikes" providing direction for syringe services programs (SSPs) to those areas with cluster overdoses within 24 hours for additional naloxone distribution. The data helped determine where to set up seven vending machines containing naloxone, hygiene kits, HIV/hepatitis test kits, condoms, personal protective equipment (PPE), and treatment/educational materials. The District also provides a 24/7/365 medical crisis and stabilization center emphasizing individual safety and risk reduction to reduce potential negative consequences associated with intoxication, including overdoses, injuries, and unnecessary interactions with the criminal justice system. The DC Stabilization Center provides clinical services focused on low-barrier, compassionate, person-centered care with 16–23-hour treatment recliners and 6 extended-stay beds (up to 3 days) designed for observing and treating complex cases. There are plans to add another site in the near future.

Indiana

Established in 2016, the Indiana Recovery Coach and Peer Support Initiative (RCPSI) goal was to engage opioid overdose patients in ED settings and promote entry into recovery services. It was a relatively novel idea for EDs and there were limited examples from which the RCPSI could draw, but an Indianapolis hospital's quality improvement initiative/pilot was employing peers to help link overdose patients to treatment. Patients admitted to the ED and identified as having an opioid-related issue were targeted for services. Peers included individuals with lived experience and/or their family members.



In 2019, this model was expanded to provide peer support in more settings than just the ED. The Mobile Integrated Response System (MIRS) evolved to use teams to provide peer support, clinical interventions, referrals, and transportation to treatment (including MOUD), food banks, childcare, medical clinics, recovery housing, employment support and many more necessary services for clients in a variety of settings. The MIRS teams are comprised of peer recovery coaches and clinicians with the option to add prescribers and first responders as appropriate. While the overall objective across all sites is the same, each team has adapted a service delivery approach best suited to meet the needs of the local community, resulting in three (3) different models. However, across all models, there was consensus that working with community partners was essential to the success of the program, as these partnerships help the MIRS site meet client needs. Today, MIRS sites operate in 50 of Indiana's 92 counties, both rural and urban. A 2023 program evaluation found significant positive outcomes based on an analysis of GPRA data comparing individual intake and 6-month follow-up, including an increase in abstinence, employment/education engagement, housing stability, and a decrease in health/behavioral/social consequences and ED involvement. [9]

Washington

Seattle, Washington is the first U.S. city to implement a program where emergency medical technicians and firefighters in the field can use buprenorphine to treat people who have overdosed on fentanyl and other opioids. This program follows the success the city has had with its paramedics administering the medication. The pilot is the city's latest effort to address a drug crisis fueled by fentanyl and contributing to skyrocketing overdose deaths in Washington.

Seattle Fire Department paramedic Brett Cameron handles a package of buprenorphine inside an ambulance. The medication, administered as a sublingual tablet, blocks opioid withdrawal symptoms and prevents an opioid overdose for about one day. (Seattle Fire Department)[11]

Utilized after someone is revived with naloxone, buprenorphine quickly blocks intense withdrawal symptoms, including diarrhea, vomiting and muscle pain for about one day. In the pilot, paramedics administered buprenorphine to 39 patients. A review of 16 of those patients found that 12 coordinated with fire department employees to reach their appointment for further treatment.[10]

Key Learnings and Future Considerations

When designing and implementing post-overdose response programs, states should consider several important factors. While there are several successful and promising approaches, data is clearly crucial to decision making. With the fluctuation of demographics and incidents, a comprehensive up-to-date dashboard can point the way to a needed response as well as reduce duplication of effort. Most states are focused on distributing educational materials, naloxone, and other supplies to reduce risk. It's important that these efforts continue even as other programs are considered. Finally, studies continue to show that engaging individuals following an overdose event is essential to prevent a subsequent episode. Like so many issues related to treatment and recovery, there is no magic bullet that addresses the entirety of the issue. States

should consider a variety of strategies to find those in need of services, then “meet them where they are” in trauma-informed ways that ensure compassion and empathy to connect them to care and support. This requires well-trained teams of professionals, ongoing evaluation, and flexibility to adjust to changing needs. States will continue to benefit from opportunities to share information with each other on successful approaches in addressing the continuing epidemic of overdose deaths.

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About the Opioid Response Network (ORN): The SAMHSA-funded *Opioid Response Network (ORN)* assists states, organizations, and individuals by providing the resources and technical assistance (TA) they need locally to address the opioid crisis and stimulant use. TA is available to support the evidence-based prevention, treatment, and recovery of OUD and StUD. To ask questions or submit a request for TA, visit www.OpioidResponseNetwork.org

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