

The Overdose Response Strategy: Reducing Drug Overdose Deaths Through Strategic Partnership Between Public Health and Public Safety

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ABSTRACT

Context: Public health and public safety collaborations can strengthen and improve efforts to address the worsening drug overdose crisis.

Program: The Overdose Response Strategy is addressing this need through a national public health and public safety program designed to foster the cross-sector sharing of timely data, pertinent intelligence, and evidence-based and innovative strategies to prevent and respond to drug overdose.

Implementation: Since 2015, the Overdose Response Strategy has been implemented by state-based public health and public safety teams who work together to prevent and respond to drug overdoses within and across sectors, states, and territories. The public health and public safety teams share data systems to inform rapid and effective community overdose prevention efforts; support immediate, evidence-based response efforts that can directly reduce overdose deaths; design and use promising strategies at the intersection of public health and public safety; and use effective and efficient primary prevention strategies that can reduce substance use and overdose long term. Implementation of the Overdose Response Strategy aligns with the US Centers for Disease Control and Prevention's Strategic Partnering Framework.

Evaluation: The evaluation of the Overdose Response Strategy, which is currently underway, is based on 2 evaluation approaches: Collective Impact and Organizational Network Analysis. These approaches provide a way to look at the strength of the relationship between public health and public safety and the way the relationship is leveraged to advance program goals and objectives.

Discussion: The Overdose Response Strategy serves as a strategic partnership model that can potentially be applied to other issues, such as gun violence, that may benefit from public health and public safety collaboration.

KEY WORDS: overdose, partnership, public health, public safety

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The findings and conclusions presented in this article are those of the authors and do not necessarily represent the views of the US Centers for Disease Control and Prevention.

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Drug overdose deaths in the United States continue to rise. The most recent provisional data from the US Centers for Disease Control and Prevention (CDC) for the 12-month period ending November 2021 estimated more than 106 000 drug overdose deaths.¹ Synthetic opioids (eg, fentanyl) excluding methadone, alone or in combination with other drugs, are a major factor in the substantial increases in overdose deaths.¹

Public Health

Drug overdoses are unequivocally a public health issue. Uniform, consistent, ongoing, timely data are

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crucial to inform action that will save lives. Public health surveillance is the foundation for public health response, including policy and practice.² Increases in drug overdoses¹ show the importance of overdose surveillance data. The ongoing collection and analysis by health departments of fatal and nonfatal overdoses assist the CDC, states, and local jurisdictions in monitoring the magnitude and scope of overdoses nationally, regionally, and locally. Surveillance data from multiple partners (medical examiners/coroners, emergency departments, first responders, etc) can provide a more complete picture of the nature of the substance use and overdose problem, facilitating a multisector systems response. However, challenges exist in sharing and translating these surveillance data. Cross-sector partnerships can help turn data into action to inform the development of prevention and intervention strategies that can lead to improved community outcomes.

Public Safety

Law enforcement, courts, corrections, prosecution, emergency medical services, and other public safety partners may encounter people who experience substance use and overdose. Law enforcement and emergency medical services respond to overdose calls and can prevent fatal overdose by administering naloxone. As overdoses increase, so does the potential for compassion fatigue and vicarious trauma for first responders.³

Law enforcement has traditionally focused on apprehending and prosecuting people who supply and possess drugs, and interdicting the illicit drug supply, including detecting and dismantling criminal networks that supply these substances. More recently, there has been a shift away from arrest to diversion and deflection to care and treatment. Public safety partners have begun to see the benefits of partnering and sharing information with public health to achieve their goal of improving outcomes for individuals, keeping the community safe, while reducing jail populations.⁴

Successful overdose prevention/intervention strategies benefit from strong commitment of multisector agencies and strategic, bidirectional partnerships among these collaborators. Real, sustainable, collaboration between public health and public safety is important to reducing overdoses. These collaborations in local jurisdictions involve information sharing, accountability, committing to the identified strategies and to being an engaged partner, and taking action to reduce drug overdose.

Overdose Response Strategy

Public health and safety partnerships are emerging in local communities. To support and assist local communities in reducing drug overdoses and saving lives, the Overdose Response Strategy (ORS), a unique, unprecedented collaboration between public health and public safety, was created to foster the sharing of timely data, pertinent intelligence, and evidence-based and innovative strategies.⁵

The ORS, a partnership between the CDC and the Office of National Drug Control Policy's High-Intensity Drug Trafficking Area (HIDTA) program, is implemented by teams made up of Drug Intelligence Officers (DIOs) and public health analysts (PHAs), who work together to address drug overdose-related issues within and across sectors, states, and territories.⁵ By sharing information across sectors, the ORS is growing the body of evidence related to early warning signs and prevention and response strategies. In 2015, the program began with 5 HIDTAs in 15 states. As of July 2021, all 33 HIDTAs are participating and there are PHA and DIO positions funded in 50 states, Puerto Rico, and the US Virgin Islands.⁵

The ORS and CDC's Strategic Partnering Framework

To support the development, maintenance, evaluation, and ongoing improvement of key public health partnerships, the CDC created the Strategic Partnering Framework.⁶ The comprehensive approach begins before a partnership is established with an organizational self-assessment and progresses through partnership selection, building, maintenance, and evaluation. The framework is designed for use at any level of partnership—national, state, or local—and in any size partnership, from single partner to coalition. Later, this comprehensive, flexible framework is used to deconstruct the lifecycle of the ORS partnership,⁵ organized by the phase of the framework, demonstrating how the framework can guide ongoing improvement cycles for this partnership and others.

Methods

Organizational assessment

The assessment phase begins with a clear understanding of each organization's goals, mission, priorities, readiness to partner, and leadership capacity. Common criteria for both partner organizations to

examine might include their commitment to shared goals and vision. On a very practical note, each organization is asked to identify a shared project or task that can propel the possible partnership. Although the CDC and the HIDTA did not engage in a formal organizational assessment before creating the ORS, the 2 entities did find a shared vision by framing the collaboration as an effort to prevent overdose deaths and save lives. Both organizations and their home disciplines (public health and law enforcement) shared a commitment to saving lives, albeit via different strategies. Both entities were also focused on coordinating with federal, state, local, and tribal partners to address regional drug threats. Leaders on both sides regularly cited the need for the collaboration and the urgency of the work. The result was a new shared vision for an unprecedented collaboration that was innovative, urgent, and deeply committed to addressing the drug overdose crisis.

Partner selection and formalizing partnership processes

The partner selection phase moves from assessment of fit and complementary goals to formalized consensus about shared mission, vision, and strategic directions; agreement on the level of partnership engagement; determining what each organization can offer the other; and articulating plans for the common project or task.

To codify the mission, vision, and strategic directions of the ORS, leadership from the CDC and the HIDTA built the template for a regional program, modeled largely on the CDC's programmatic experience as a funding agency. The guiding mission, the "north star," of reducing overdose deaths was prominently featured in all written materials, coupled with shared goals (eg, data sharing, engaging community-level partners) and strategic directions that leveraged both partner's expertise (ie, prevention, law enforcement, treatment, and response).⁵

Both partners recognized the need for an activity that leveraged expertise from public health and public safety, addressed a shared information need, and resulted in a tangible product, verifying the collaborative nature of the initiative. This annual product—a Cornerstone Project—has previously focused on topics such as overdose prevention in jails, public safety-led linkage to care, and 9-1-1 Good Samaritan Laws.⁵ The Cornerstones result in products that provide user-friendly recommendations and examples for the broader field of overdose prevention.⁷⁻⁹

To standardize internal communications, the ORS personnel also contributed to the creation of a program communications guide. This guide provides concise descriptions of the mission statement, value statement, program goals, talking points, and a broad

"message map" that links key activities to outcomes of interest. The ORS personnel also developed a suite of materials to streamline and systematize external communications, including an annual report, PowerPoint slides, 1-pagers, and a monthly newsletter.

Partnership building: decision making, accountability, and governance

Roles and responsibilities among PHA-DIO teams were straightforward since each team member had unique areas of skills, expertise, and interest. At the initiative level, however, decision-making roles were unclear, particularly because up until 2019, PHA positions were funded by the HIDTA program but receiving direction and guidance from the CDC.

The established trust between partners and the increasing level of enthusiasm about the ORS within the CDC hierarchy opened the door for a creative solution to this problem. Champions at the CDC agreed to invest more than \$7M to expand the ORS to the entire nation, leveraging a partnership with the National Foundation for the CDC Foundation to hire, onboard, and train the PHA workforce. This infusion of funding allowed the Office of National Drug Control Policy to use their funding to pay for all the DIOs, making the ORS a truly national program.

With clear lines of authority over the ORS workforce, key champions within the ORS developed a plan to create a governing body—an executive committee—that includes 1 representative from each of the 6 HIDTA regions and 1 leader from the CDC. Key decisions are made by consensus. Any new plan, protocol, or crosscutting programmatic decision goes to the executive committee for deliberation.

Maintenance and evaluation: maintaining the partnership through strategic planning

The ORS is deliberate about building strong, long-lasting partnerships with public health and public safety organizations at all levels of government. When a state is onboarded into the initiative, a strategic planning process takes place allowing public health and safety partners to jointly develop state-specific goals. Key participants include at least 1 to 2 representatives from each state's public health and public safety agency, as well as ORS personnel.

The ORS strategic planning is a 4-step process: (1) participants gain a deep understanding of each other's vision, priorities, current strategies within the context of the overdose crisis, relevant resources, existing partnerships, and major gaps and needs; (2) partners are reconvened for a joint session to review overlapping priorities, foster a shared purpose and understanding, and discuss desired outcomes and

corresponding objectives for the collaboration. Objectives are specific and measurable with clear timelines, which allows partners to document progress and demonstrate the success of the partnership; (3) the partners cocreate an action plan that outlines the activities necessary to meet each objective, timelines for completion, and the individuals or groups responsible for completing each activity. The action plan ensures alignment with the ORS program goals and strategies, creates a system of accountability, and is flexible to the changing needs and priorities of each state and territory. Finally, once the action plan is approved by the partners and finalized, it is used to guide ongoing discussions and updated on the basis of completed work or modifications to timelines or priorities.

Maintenance and evaluation: ongoing partnership engagement

To sustain the partnerships and ensure accountability, the ORS personnel convene ongoing meetings with each ORS team and the public health and public safety partners in their jurisdiction. Progress toward their action plan objectives, successes, challenges, and any changing priorities is discussed. These meetings improve trust among partners, encourage consistent communication, and ensure that each organization maintains engagement in the partnership. They also provide an opportunity to revisit the action plan to increase the effectiveness of the joint work. With the changing drug environment, partnerships must remain flexible and open to new opportunities for collaboration.

Maintenance and evaluation: evaluating the partnership

With the program's national expansion, the ORS leadership recognized the need for a formal, comprehensive evaluation plan. The plan is based on 2 evaluation approaches: Collective Impact and Organizational Network Analysis.^{10,11} These approaches assess the strength of the public health and public safety relationship and the way it is leveraged to advance program goals and objectives.

The Collective Impact approach not only encourages collaboration but also requires an intentional and systemic approach to building relationships between organizations and sectors and measuring progress toward shared goals. Collective Impact has 5 key components for success: a common agenda, backbone support organizations, mutually reinforcing activities, shared measurement, and continuous communication.¹⁰ The Collective Impact approach allows for examination of the ORS' role as a

backbone organization for public health and public safety partnerships.

The second approach used for evaluating the ORS is Organizational Network Analysis, which utilizes social networking theory, empirical research, and measurement approaches to determine, visualize, and describe the relationships between nodes and links in an organization.¹¹ In the case of the ORS, elements of Organizational Network Analysis are used to assess the quality of relationships, the trust between partners, the value that each partner brings to the larger collaborative, resources shared between partners, and whether process and output measures are achieved because of collaboration across the sectors. The Figure later is the ORS logic model, which provides the road map for where the ORS program is going, including what is needed to get there and the milestones along the way to measure progress. It is an essential planning and evaluation tool and also a powerful communication tool to convey the most important and effective components of the program.

Maintenance and evaluation: data collection methods

The primary data collection method for measuring the intermediate outcomes listed in the logic model is an annual online, anonymous survey disseminated to 5 key ORS partners: (1) ORS leadership, (2) PHAs, (3) DIOs, (4) Public Health Partners (ie, state public health department or mental health/behavioral health department personnel), and (5) Public Safety Partners (ie, HIDTA personnel). The ORS launched its baseline survey in January 2022, asking participants to respond on the basis of how the program operated in 2021. In addition, ORS teams complete quarterly reports to track and monitor their contributions to state and local efforts. Information from these reports is used to identify areas for program improvement and training opportunities for ORS teams and partners, facilitate cross-jurisdictional connections for teams and partners working on similar activities, and understand the strength of each PHA and DIO partnership. The objectives and activities from each ORS action plan are integrated into the PHA and DIO work plans. Key program metrics are shared with all ORS partners, and program achievements are highlighted in program-wide meetings, newsletters, quarterly and annual reports, the program Web site, partnership meetings in each jurisdiction, and external meetings and conferences.

Results

To illustrate how the ORS is executed, presented here is a description of how each of the 4 ORS

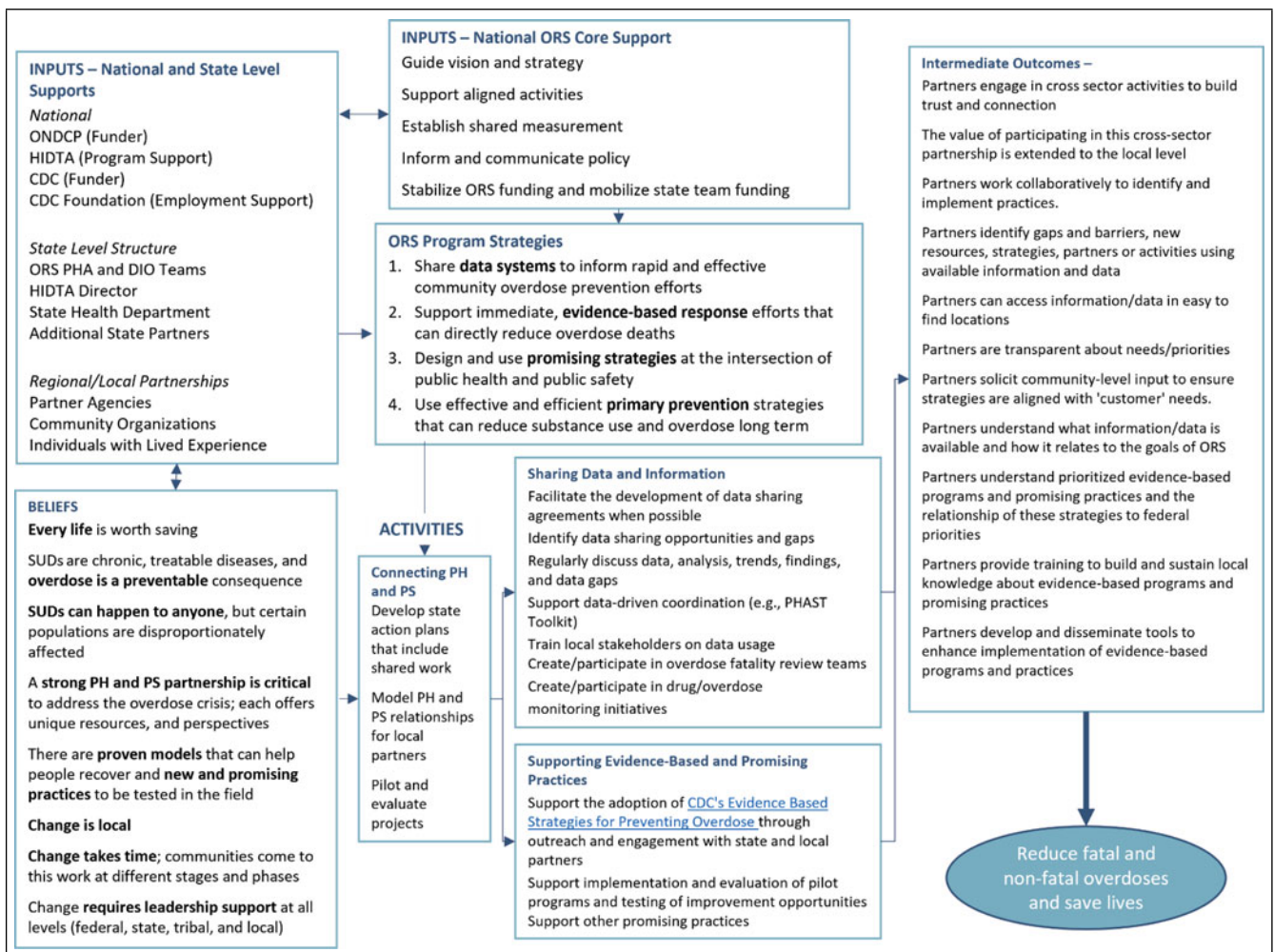


FIGURE ORS Logic Model

Abbreviations: CDC, Centers for Disease Control and Prevention; DIO, Drug Intelligence Officer; HIDTA, High-Intensity Drug Trafficking Area; ONDCP, Office of National Drug Control Policy; ORS, Overdose Response Strategy; PH, public health; PHA, public health analyst; PHAST, Public Health and Safety Teams Toolkit; PS, public safety

This figure is available in color online (www.JPHMP.com).

program strategies has been interpreted and implemented, along with an example from an ORS team.⁵ Although each example is included within a single strategy, many of these activities span more than a single goal. Likewise, although a single ORS team's work is used as an illustrative example, many ORS teams may be engaged in similar activities.

Strategy 1: sharing data systems to inform rapid and effective community overdose prevention efforts

The ORS teams often focus on strategies to improve data sharing and increase collaboration across state and local agencies. The PHAs can obtain, analyze, and act on data more quickly than in more traditional settings, and DIOs provide timely information about

newly emerging drug trends and threats in their states and regions. Two examples of innovative data-sharing initiatives are Overdose Fatality Reviews (OFRs) and the Overdose Detection Mapping Application Program (ODMAP).

Expanding OFRs

Overdose Fatality Reviews involve a series of confidential individual death reviews by a multidisciplinary team wherein a decedent's life cycle is reviewed in terms of drug use history, comorbidity, encounters with the criminal justice system, treatment history, and other factors. The review facilitates a deeper understanding of the missed opportunities for prevention and intervention that may have prevented an overdose death.¹² Implementing an OFR together with the Public Health and Safety Teams framework

can provide a comprehensive, 360° approach to overdose prevention.¹³

In New Jersey, the Drug Enforcement Administration New Jersey Division, the New York/New Jersey HIDTA and the New Jersey Department of Health (NJDOH), and Office of Local Public Health established Overdose Fatality Review Teams (OFRTs). The PHA coordinated the statewide expansion of OFRTs by establishing connections between local public health, behavioral/mental health, law enforcement, and other key partners across the state, and supporting the development of data-sharing agreements between agencies. The success of the OFRTs helped the NJDOH receive funding to expand OFRTs to 17 new counties, allowing local health departments to analyze data, identify regional trends, and evaluate strategies to decrease opioid-involved deaths. In the first year of the program, the NJDOH was able to support 19 local OFRTs and to disseminate best practices from existing OFRTs to partners in New Jersey and across the United States.

Identifying increases in overdose using ODMAP

The ODMAP provides near real-time suspected overdose data to support public safety and public health efforts to mobilize an immediate response to a sudden increase, or spike in overdose events. The ODMAP links first responders and relevant record management systems to a mapping tool to track overdoses to stimulate a real-time response and strategic analysis across jurisdictions.¹⁴

In Arlington County, Virginia, there was an increase in overdoses over a 2-week period identified through ODMAP data, triggering a spike alert. The DIO was contacted by the local police department, and the PHA reached out to other Northern Virginia partners to see whether any other areas were experiencing similar patterns. The group learned that another regional area was seeing a spike. The Arlington County partner then pushed out a Facebook post about the increase in overdoses, and it was seen by more than 5000 persons, compared with typical posts, which are seen by roughly 100 people.

Strategy 2: supporting immediate, evidence-based response efforts that can directly reduce overdose deaths

The CDC's *Evidence-Based Strategies for Preventing Opioid Overdose: What's Working in the United States* describes 10 evidence-based strategies to guide communities in preventing opioid overdose in their communities.¹⁵ The PHAs and DIOs play an essential role in adapting evidence-based strategies to fit their

communities. One such strategy is targeted naloxone distribution programs, which seek to train and equip individuals who are most likely to encounter or witness an overdose with naloxone kits.

Focused naloxone distribution

To address the need for naloxone in West Virginia, the ORS team worked in partnership with the WV Office of Drug Control Policy (ODCP), the University of Charleston (UC) Department of Pharmacy, the Department of Health & Human Resources (DHHR), and Appalachia HIDTA to provide naloxone to local law enforcement agencies through the SAMHSA First Responder-Comprehensive Addiction and Recovery Act Grant (FR-CARA). The PHA and the DIO assisted the partners in developing and implementing a process for resources to transfer smoothly from UC to local law enforcement and for data to be shared back to UC for their records and reporting requirements. In collaboration with the aforementioned agencies, the PHA and the DIO successfully facilitated the distribution of 500 naloxone kits.

Strategy 3: designing and using promising strategies at the intersection of public health and public safety

The PHAs and the DIOs bring public health and public safety partners to the table to coordinate responses for novel, emerging drug threats, where evidence-based strategies may not exist. In many areas, rates of overdoses involving psychostimulants such as methamphetamine are rapidly increasing.¹⁶ In response, the Massachusetts ORS team partnered with Boston Medical Center Office Based Addiction Treatment Training and Technical Assistance (BMC OBAT TTA) team to host 2 separate virtual training events that reached almost 400 public health and public safety partners across the New England region. The training covered the effects of methamphetamine use and risks for overdose, current evidence-based treatment strategies, and strategies for de-escalation of patients experiencing methamphetamine psychosis.

Strategy 4: using effective and efficient primary prevention strategies that can reduce substance use and overdose long term

The ORS teams often work with local partners to understand the needs of high-risk populations, educate communities about the risks associated with drug use, and ensure the adoption of evidence-based practices. The PHA in Arizona became a certified community educator for dissemination of PAX Tools, which is a collection of evidence-based, trauma-informed strategies to improve cooperation and self-regulation with

youth.¹⁷ The program also provides tools that communities can use to teach children to self-regulate their behavior, which can lead to changes in their propensity to make better choices about substance use. These tools will be incorporated into community prevention education efforts already underway at the Arizona HIDTA.

Discussion and Conclusion

Collaboration between public health and public safety is a critical step to saving lives and responding to the drug overdose crisis. These partnerships generate challenges and successes; however, the ORS has demonstrated that these partnerships are possible at multiple levels of government—federal, state, and local. In alignment with the CDC's Strategic Partnering Framework, the ORS has engaged in activities that strengthen these collaborations including partner selection and building wherein it was collectively agreed that the prevention of drug overdose fatalities was the primary mission of the partnership and created written documents to standardize and codify the partnership. The ORS has also taken steps to maintain and evaluate the partnership through strategic planning and collecting feedback from program partners. Continued support from the CDC and the HIDTA, along with PHAs and DIOs helping state-level partners se-

cure additional funding for public health and public safety activities can help sustain the ORS' efforts. The ORS serves as a model that could potentially be replicated across other health and safety issues, such as gun violence or bioterrorism attacks. It is beneficial for public health and public safety entities to pursue opportunities for collaboration and to monitor the innovation and impact made possible by their partnership.

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Implications for Policy & Practice

- A strong and collaborative partnership between public health and public safety is critical to address the current drug overdose crisis. Each sector offers unique opportunities and resources for effective intervention strategies.
- Multisector collaborations between public health and public safety are feasible when there is leadership buy-in, a shared vision and goals, shared decision making and governance, standardized partnership and program implementation tools, and a funding source.
- Applying the CDC's Strategic Partnering Conceptual Framework can lead to the successful implementation of cross-sector partnerships that span multiple levels of government—federal, state, and local.
- Evaluation approaches such as Collective Impact and Organizational Network Analysis offer a way to evaluate and assess the strength of cross-sector partnerships, including public health and public safety partnerships.
- The Overdose Response Strategy offers a model of a public health and public safety partnership that could be replicated to address other issues that cross both disciplines.

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