



Bureau of Justice Assistance (BJA)

Comprehensive Opioid, Stimulant, and Substance Abuse Program (COSSAP)

# Public Safety and Public Health Partnerships to Address Stimulants

## Virtual Workshop Report

### Executive Summary

The United States has been battling an epidemic of overdose deaths since the beginning of the 21st century (Hedegaard et al., 2020). Recently, a growing number of overdose deaths have been related to stimulants, including cocaine and methamphetamine. From 2012 to 2018, cocaine-related mortality increased threefold, while methamphetamine-related mortality rose fivefold (Ciccarone, 2017, 2019). These increases have led experts to suggest that the overdose death epidemic, historically driven by prescription opioids, heroin, and fentanyl, is entering a new “fourth wave” (Ciccarone, 2021; National Institute on Drug Abuse, 2020).

This overdose epidemic has sparked the development of new and promising approaches in response to substance use that leverage partnerships between public safety and public health agencies (e.g., see Goodison et al., 2019; Police Executive Research Forum [PERF], 2016). Stakeholders are coming together to manage the crisis, driven by the recognition that substance use is not just a public safety problem but also a public health emergency. As such, the goal of many collaborative efforts is to address the root causes of substance use and addiction.

The Bureau of Justice Assistance’s (BJA’s) Comprehensive Opioid, Stimulant, and Substance Abuse Program<sup>1</sup> (COSSAP) supports local, state, and tribal responses to illicit substance use and misuse in order to reduce overdose deaths, promote public safety, and support access to treatment and recovery services in the criminal justice system.

As part of COSSAP, BJA hosted a 2-day virtual workshop on March 11 and 12, 2021. This workshop, supported by RTI International and PERF, brought together pioneering law

enforcement leaders, practitioners in public health settings, and researchers with extensive subject-matter expertise to discuss various partnerships and strategies designed to address the rise in stimulant use. **From these workshop discussions, several key recommendations emerged:**

1. **Implement first responder deflection and pre-arrest diversion programs to connect people with stimulant and other substance use disorders (SUDs) to treatment and other services (Charlier et al., 2020).**
2. **Develop more robust methods to identify, track, and understand the illicit drug supply market.**
3. **Support research that seeks to develop medications for stimulant use disorder and strategies to respond to stimulant-related overdoses.**
4. **Implement training on and increase community awareness of ways to address the stigma associated with substance use and addiction.**
5. **Support harm reduction-focused, community-based programs that seek to reduce the negative consequences associated with drug use.**

Over the last 3 years, BJA has funded more than 300 projects as part of COSSAP that support these recommendations.<sup>2</sup> In addition, the COSSAP training and technical assistance (TTA) program<sup>3</sup> supports jurisdictions—including BJA and partner grantees, states, tribes, and local communities—in implementing these recommendations and in making other efforts to build and sustain multidisciplinary public safety and public health responses to the use of illicit substances. Through COSSAP TTA, expertise is available to help jurisdictions and their respective projects to support a wide range of strategies that address these key recommendations.

## Public Safety and Public Health Partnerships to Address Stimulants: Virtual Workshop on Partnerships to Address Stimulants

<https://www.cossapresources.org/Media/Video/0de56ea7-d300-4390-b5e2-503d2956b167>

Although opioids have been at the forefront of the overdose epidemic, high mortality involving cocaine and methamphetamine has been gaining such force that some experts describe it as the “fourth wave” of the drug epidemic (Ciccarone, 2021). On March 11 and 12, 2021, BJA hosted a virtual workshop as part of COSSAP. This 2-day workshop, supported by RTI International and PERF, gathered leading practitioners, researchers, and policymakers to discuss the impact of stimulants in communities across the country. The goal of the workshop was to highlight innovative partnerships among diverse stakeholders in order to prevent and respond to increased stimulant use. Participants included representatives from state, local, and federal law enforcement agencies; researchers and public health officials; and social service providers. The workshop was held via Zoom and consisted of four 90-minute panel presentations, each followed by a moderated question-and-answer session. Panel topics included the scope and science of stimulant addiction, police-led initiatives, and partnerships to address stimulants, broader policy efforts, and community relations.

The COSSAP workshop was the product of a broader change, catalyzed by feedback received from frontline practitioners, in BJA’s primary focus on the opioid epidemic to include stimulants and other substances.<sup>4</sup> In her opening remarks, Kristen Mahoney, the Acting Director of BJA and Deputy Director for programs, noted that this was one of the first formal discussions of public safety and public health partnerships to address stimulants. Acting Director Mahoney discussed the importance of addressing clinical challenges in treating individuals who have stimulant use disorder, including issues related to screening and access before individuals enter the criminal justice system. She

also highlighted the value of “security integration,” in which information about an individual’s history of stimulant use disorder and related problems is shared among stakeholders to facilitate a fully coordinated and holistic response. Acting Director Mahoney noted that the stimulant epidemic is a key priority in the Biden-Harris Administration’s Statement of Drug Policy Priorities for Year One, which emphasizes access to evidence-based treatment for stimulant use disorder; strategies to expand access to treatment; investments in evidence-based, cost-effective programming in schools and communities to mitigate harms; and expansion of access to ongoing treatment and recovery.

## The Scope and Science of Stimulant Addiction

<https://www.cossapresources.org/Media/Video/1744b032-be4d-4be3-9a4b-ba2310dee7dc>

The United States has experienced a troubling increase in deaths associated with stimulants in recent years (Volkow, 2020). According to the Centers for Disease Control and Prevention (CDC, 2019), more than 70,000 individuals died from drug overdoses in 2017, with 13,942 deaths related to cocaine use and 10,333 deaths involving psychostimulants (such as methamphetamine and amphetamine). Furthermore, the rate of cocaine-related overdose deaths tripled from 2012 to 2018, while the rate of

### The **Scope and Science of Stimulant Addiction**

panel laid out a critical foundation of the problem facing public safety and public health partners. The panel emphasized how meaningful collaborations can prevent and reduce stimulant use disorder.

The panel was moderated by Mark Edlund, senior research scientist at RTI International, and featured presentations from Tisha Wiley of NIDA and William Heuett of the U.S. Drug Enforcement Administration’s (DEA) National Forensic Laboratory Information System (NFLIS-Drug).

psychostimulant-related overdose deaths nearly quintupled (Hedegaard et al., 2020).

Data from NFLIS-Drug,<sup>5</sup> DEA's program for cataloging and tracking forensic analysis results from law enforcement drug seizures, show that numbers of methamphetamine reports have increased nationally (except in the Northeast) and that methamphetamine is the highest-reported substance in the nation. Further, stimulants as a general category have appeared at higher rates in drug reports than they have in the past, and many novel psychoactive substances have recently emerged as popular subcategories of stimulants (approximately 100 since 2015). Increasing mortality rates indicate that stimulants are being used in combination with other dangerous drugs such as fentanyl (Volkow, 2020). Co-use has largely influenced the trends in overdoses between 2011 and 2017, as the co-use of stimulants and opioids nearly doubled during that time (from 19% in 2011 to approximately 34% in 2017; see Ellis et al., 2018). Co-use has largely been driven by the ease of accessibility and affordability of methamphetamine as a substitute for opioids and by the synergistic effects that occur when an opioid and a stimulant are used simultaneously (Ellis et al., 2018; Hainer, 2019; Hoots et al., 2020).

Stimulants, informally known as "uppers" for their energizing effect on the body, affect users physically and mentally, and misuse can have negative short- and long-term effects. Stimulants can also have legitimate uses; some are often prescribed for conditions such as attention-deficit/hyperactivity disorder or eating disorders. However, stimulant abuse, in which the user begins a pattern of bingeing behaviors (DEA, 2020), can lead to stimulant use disorder. Stimulant use disorder occurs when people who use stimulants take more than necessary, fail to control their use, experience craving, or experience withdrawal symptoms. (Diagnostic criteria require experiencing two or more symptoms over a 12-month period [Substance Abuse and Mental Health Services Administration, 2020].)

Stimulants produce a number of physiological effects, including feelings of exhilaration, extended wakefulness, and loss of appetite (DEA, 2020; Peavy et al., 2021). More

frequent use of stimulants, along with the use of higher dosages, can often lead to aggressive behaviors, such as suicidal or homicidal actions and paranoia. Stimulant overdose is characterized by high fever, convulsions, and cardiovascular collapse, which can lead to death (DEA, 2020). Physiological tolerance to stimulants can develop rapidly, and strong psychological dependence on more potent stimulants, such as amphetamine, methamphetamine, and cocaine, has been observed. There is mixed evidence that users of stimulants generally do not exhibit physical symptoms during withdrawal (unlike users of opioids, for example, whose withdrawal symptoms often mimic flu symptoms). Instead, stimulant withdrawal is often characterized by feelings of sedation, depressed mood, inability to experience pleasure, psychomotor retardation, and dulled responses. During co-use with opioids, the alternating use and withdrawal of one of these drugs can produce symptoms that mimic the effects or withdrawal symptoms of the other drug (Peavy et al., 2021).

In a meta-review, Ronsley and colleagues (2020) assessed evidence about treatment options for individuals with stimulant use disorder. Treatment strategies for stimulant use disorder generally fall into one of two categories: (1) behavioral interventions and (2) pharmaceutical interventions. Behavioral interventions include contingency management (CM) (De Crescenzo et al., 2018; Farronato et al., 2013; Lee & Rawson, 2008; Roozen et al., 2004; Schierenberg et al., 2012; Schumacher et al., 2007), cognitive behavioral therapy (CBT) (De Crescenzo et al., 2018; Harada et al., 2018), and acupuncture (Gates et al., 2006; Mills et al., 2005). CM operates on a reward-based system, in which an incentive (such as a gift card or voucher) is provided for a specific behavior, and has been shown to have significant benefits in treating stimulant misuse. Further, additive benefits may result from the combination of CM and other types of interventions. In comparison, CBT is a form of talk therapy that is designed to help patients learn strategies to recognize and modify negative thoughts and behaviors. Although research supports the use of CBT for treating other SUDs, there is still limited evidence of its effects on treating stimulant use disorder

specifically (Ronsley et al., 2020). Acupuncture is another type of treatment often used for stimulant use disorder, frequently in conjunction with other therapies. Although the treatment mechanism is unclear, research has suggested that acupuncture's calming effects may decrease cravings (Margolin et al., 2002). However, Ronsley and colleagues' (2020) meta-review found no significant benefits of acupuncture across studies.

Some recent efforts have assessed pharmacological interventions and harm reduction strategies to treat stimulant use disorder and stimulant-related overdoses. Pharmacological interventions utilize medications to treat or manage SUDs. The U.S. Food and Drug Administration (FDA) has not approved any medications for the treatment of stimulant use disorder.<sup>6,7</sup> However, a number of medications, such as naltrexone, ibogaine, lobeline, and vaccines, are being studied. As another type of approach, harm reduction-focused strategies include those aimed at mitigating the harmful effects associated with drug use. For example, some strategies have advocated for expanding the availability of drug test kits, which would help support safer stimulant use for people who use drugs (Fleming et al., 2020).

## Panel 1: Police-Led Initiatives

<https://www.cossapresources.org/Media/Video/d32a011e-f4fa-49cc-9d32-22c7744f9c7d>

Law enforcement officers and other first responders play critical roles in addressing substance use-related problems in their communities. First responders routinely encounter individuals with SUDs, often in times of crisis, and are well-positioned to engage and intervene to disrupt the cycle of addiction. A growing number of first responder agencies have taken a lead role in responding to stimulant use by implementing first responder deflection (deflection) and pre-arrest diversion programs.<sup>8</sup> These programs help connect individuals with substance use and mental health disorders to treatment and services and provide opportunities to redirect them away from placement in jails or emergency

departments (Charlier et al., 2020). Many deflection initiatives incorporate key principles of public health and harm reduction. Also essential to these programs are partnerships with other stakeholders in government, such as public health and social service agencies, and in the private sector, such as treatment providers, as well as with communities themselves.

The **Police-Led Initiatives and Partnerships** panel explored municipal, county, state, and federal law enforcement responses to stimulants to identify promising practices, barriers to implementation, and critical gaps in knowledge or resources. The panel was moderated by Sean Goodison, deputy director of the Center for Applied Research and Management at PERF, and featured the following five presentations:

- ◀ **Addressing Stimulant Use in our Communities: A Different Approach for Police Officers to Deal with Meth Possession and Use**—Chris Magnus, Chief, Tucson, Arizona, Police Department
- ◀ **Police-Led Initiatives: Franklin County, Florida**—A.J. Smith, Sheriff, Franklin County, Florida, Sheriff's Office
- ◀ **Public Safety and Public Health Partnerships to Address Stimulants**—Thomas Farmer, Special Agent in Charge, Tennessee's Dangerous Drugs Task Force
- ◀ **Police-Led Initiatives: Pennsylvania Sheriff's Association**—Thomas Maioli, Executive Director, Pennsylvania Sheriffs' Association
- ◀ **The Latest on the Stimulant Crisis: An Update from the National Emerging Threats Initiative**—John Eadie, Public Health and Prescription Drug Monitoring Program Project Coordinator, National Emerging Threat Initiative under the High Intensity Drug Trafficking Areas (HIDTA) program

A common refrain among the panelists was that arrest and incarceration are not viable solutions to stimulant use disorder and can instead result in unintended consequences, such as loss of employment and housing or increased stigma, which can make recovery more difficult. Panelists instead advocated for the need to treat people with stimulant use disorder with respect while addressing the underlying causes of addiction. Chief Chris Magnus of the Tucson Police Department (TPD) in Arizona, for example, referred to work by Daniel Sumrok, the director of the Center for Addiction Science at the University of Tennessee Health Science Center's College of Medicine, that studies the link between stimulant use and adverse childhood experiences (ACEs).<sup>9</sup> Dr. Sumrok suggests that "addiction" is more appropriately framed as "ritualized compulsive comfort-seeking," or a normal response to adversity that individuals experience in childhood or as young adults. In other words, people often use stimulants (or other drugs) to deal with past trauma. Accordingly, strategies should address a person's unique ACEs and equip them with alternative strategies that are not harmful. Several methods for accomplishing this goal were highlighted, such as motivational interviewing and behavioral therapy that reinforces positive behavior and rewards healthy choices. Chief Magnus noted that wraparound services that follow a strengths-based, needs-driven approach to care (e.g., see Bruns et al., 2004) should ideally be offered first so that individuals are stabilized in a safe environment to ensure that other therapies can be introduced successfully. For law enforcement agencies, it is vital to connect individuals who are suffering from stimulant use disorder with appropriate treatment or social services, typically through deflection or pre-arrest diversion programs. Chief Magnus discussed TPD's deflection model, which leverages nonconsequential (i.e., without the threat of arrest or legal action) self-referrals at local police stations as well as social referrals in the field to make these connections. The TPD deflection program has a team in place for proactively seeking out people with stimulant use disorder and offering them help. The key to deflection programs is that they should be easily accessible and involve quick, direct access to high-quality

treatment options. This requires strong partnerships with service providers. In Tucson, the deflection model involves collaboration between the TPD and local service providers, which guarantees the immediate availability of services at any given time.

Chief Magnus explained that it can be difficult to find support for deflection programs among officers and community members. Successful implementation depends on strong leadership within law enforcement and first responder agencies in order to overcome and reverse the negative stigma associated with stimulant use disorder, as well as an organizational culture that rewards traditional law enforcement responses, such as arrests. In addition, Chief Magnus discussed the importance of involving officers in the development of any new program, which can foster buy-in and improve internal support. For example, the TPD deflection model limits eligibility for deflection to individuals who have committed misdemeanors or certain felonies, although officers retain a considerable degree of discretion in decisions about who is referred. Chief Magnus also expressed the need to begin training for these programs early, ideally during pre-service or academy training. Finally, data and evaluation play key roles in garnering support for deflection programs. Chief Magnus explained that the inefficacy of the "revolving door" of incarceration for those with SUDs could prompt more officers to support deflection programs and other innovative methods for responding to addiction. In Tucson, for example, 1,700 individuals were deflected between July 2018 and March 2021, and deflection involved nearly 40 percent less officer time than an arrest. It is critical that agencies collect data before programs are implemented, so their efficacy can be measured and responses can be updated as needed. Chief Magnus discussed the value of collaborating with a strong research partner to help plan, track, and evaluate whether a program is achieving its intended goals.

Sheriff A.J. Smith of Franklin County Sheriff's Office (FCSO) in Florida offered a smaller community perspective involving a similar effort to connect individuals with stimulant use disorder to treatment and social services. He stressed



the need to give individuals who had been arrested for drug use the opportunity to enter treatment rather than be incarcerated. Although methamphetamine use is a serious issue in Franklin County, a major challenge is the lack of state or federal funding to support treatment and other behavioral health services for people who use it. Although some resources are available, they are largely dedicated to addressing opioid use. As a result, there is a lack of treatment providers in many smaller, less-populated communities. Treatment for methamphetamine use, in particular, can be a difficult process, and many people with stimulant use disorder lack the financial resources necessary to complete it. Many people with stimulant use disorder may be motivated to enter treatment, but that opportunity is lost without a dedicated and immediate treatment option. Sheriff Smith discussed recent efforts Franklin County undertook to overcome these challenges by partnering with a private treatment provider to secure funding for a dedicated 18-bed facility for recovery. Sheriff Smith also hired a substance abuse coordinator whose primary task is to help people find and enter treatment, and he has partnered with community stakeholders, including faith-based organizations that offer rehabilitation programs.

Thomas Farmer, special agent in charge of Tennessee's Dangerous Drugs Task Force, discussed state-level expansion of treatment services in Tennessee, which served a growing number of people between 2017 and 2020. Lacking a viable option for medication-assisted treatment, most stimulant-related treatment involves psychosocial interventions—such as CBT—that leverage the matrix model<sup>10</sup> covering six clinical areas: (1) individual/conjoint therapy, (2) early recovery services, (3) relapse prevention, (4) family education, (5) social support, and (6) urine testing. Tennessee plans to expand other initiatives implemented during the opioid epidemic to address stimulants. There are also plans to relaunch programs developed during earlier waves of methamphetamine use, including media campaigns with printed resources about the negative effects of methamphetamine, increasing referrals to REDLINE (a phone- and text-based service providing treatment referrals

and resources in Tennessee), and expanding the Substance Abuse Prevention Coalition's scope of work to include training on methamphetamine use.

Training is another key method for changing the way first responder staff think about and respond to individuals with stimulant use disorder. Thomas Maioli, executive director of the Pennsylvania Sheriffs' Association (PSA), highlighted collaborations between PSA and treatment professionals to develop and provide harm reduction training to first responders, including law enforcement, emergency medical services (EMS), and probation and parole officers. This training includes a primer on addiction, the cycle of addiction, and the stigma associated with substance use. The 3-hour training program, developed over an 18-month period with funding from Bloomberg Philanthropies, has been offered on over 20 occasions. PSA has also begun a partnership with the University of Pennsylvania to evaluate the training program. Mr. Maioli noted that PSA is working with the National Sheriffs' Association to expand the program into other states. Although the training program is still largely focused on opioids, it may offer a promising model for stimulants. Stimulant use disorder is best addressed with public health and harm reduction strategies, but the sale and trafficking of stimulants pose a serious threat to public safety. Several panelists discussed increases in crimes related to methamphetamine within their jurisdictions. Sheriff Smith explained the need to target enforcement measures against individuals selling large quantities of drugs or operating clandestine laboratories rather than street-level dealers selling small quantities, who often have stimulant use disorder themselves or problems with other substances. In the latter case, diversion to treatment and services is the more appropriate response. FCSO has also implemented a zero-tolerance policy for methamphetamine distributors, followed by aggressive media campaigns to publicize instances when a distributor has been caught. A robust social media campaign has helped increase awareness about law enforcement efforts, leading to increased numbers of tips from community members to support investigations. Sheriff Smith also noted

that FCSO partners with a local U.S. Attorney's Office to advocate for lengthy sentences for major drug traffickers.

Data form a key component of any community-based drug response. John Eadie, Public Health and Prescription Drug Monitoring Program project coordinator of the HIDTA Program's National Emerging Threat Initiative, discussed the development of an early warning system to identify real-time changes in drug trends so that programs can be adjusted accordingly. He explained that seizure data are readily available from local law enforcement agencies, but overdose death data may not be available for over a year from the time they are originally recorded. Trends in seizure and death data from recent years demonstrate a high correlation between the two, suggesting that seizure data can be a good warning signal for shifts in drug supply across the country. Other studies have shown a similar relationship (e.g., Zibbell, 2019).

## Panel 1 Discussion

The Panel 1 discussion focused primarily on the issue of securing law enforcement buy-in for public health-oriented responses to substance use. Chief Magnus commented that some departments assign officers to designated units for whom responding to substance use-related calls is their full-time job. However, in TPD, department leaders expect all officers to play a role in responding to substance use, and this expectation is clearly communicated to staff members. Chief Magnus explained that one of the more helpful ways to foster buy-in for new programs among officers was to identify leaders embedded within the rank-and-file or mid-level supervisors, those with credibility or influence among their peers who can advocate or promote adoption of the responses. Finally, Chief Magnus discussed the need to examine reward structures within law enforcement agencies, suggesting that officers need to be rewarded for trying new ideas.

In addition to buy-in, the discussion covered training. Although training is an important part of implementing new programs, the panelists noted that there is a lack of training available, particularly for smaller departments. In

general, the panelists agreed that there are few evidence-based trainings for officers on responding to stimulant use disorder and that this would be a helpful area for future development.

## Panel 2: Policy Efforts

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The overdose epidemic requires a holistic response encompassing the combined efforts and resources of

The **Policy Efforts** panel focused on broader stakeholder initiatives to address stimulants, including programs, services, and resources not only for those with stimulant use disorder, but also for family members of those with SUDs. The programs are typically led by non-law enforcement agencies, although police often play an important role. The panel was moderated by Nicole Banister, policy analyst at the National Governors Association, and featured the following five presentations:

- ✦ **National Alliance for Drug Endangered Children: The DEC Mission**—Eric Nation, director of training and development, National Alliance for Drug Endangered Children
- ✦ **Conducting Public Health Science with Law Enforcement Data: Implications for Community-Based Drug Checking**—Jon Zibbell, senior research public health analyst, Community Health and Implementation Research Program at RTI International
- ✦ **Handle With Care Program**—Andrea Darr, director, West Virginia Center for Children's Justice
- ✦ **Substance Use Disorder in Pennsylvania: Challenges & Collaborations for Addressing Stimulants**—Kimberly Coleman, chief of staff, Pennsylvania Department of Drug and Alcohol Programs
- ✦ **Police Efforts: Nevada Attorney General's Office**—Mark Krueger, consumer counsel, Nevada Attorney General's Office

diverse stakeholders. Many public and private organizations provide critical programming and services that not only help individuals with stimulant use disorder on their path to recovery but also their family members. Although law enforcement agencies may support these programs, they are often led by stakeholders in public health, social services, or advocacy groups.

One organization, for example, the National Alliance for Drug Endangered Children (National DEC), provides tools to multidisciplinary teams to respond to problems related to drug use in their communities. According to Eric Nation, National DEC's director of training and development, the organization's mission is to teach stakeholders how to identify and take appropriate action to help children affected by substance use. However, Mr. Nation noted that significant policy changes are needed to overcome competing priorities, obligations, and even the different professional lexicons among stakeholders, such as law enforcement agencies, correctional agencies, child welfare organizations, and behavioral health providers, to optimize collaborative efforts. For example, to facilitate stakeholder collaborations, policies are needed to govern effective sharing of information, because agencies typically collect data of limited scope along different timelines. Mr. Nation described how one partnership had involved the development of a data checklist that partners used to ensure that all stakeholders collected requisite information on children and families to improve responses. Cross-disciplinary training on trauma-informed approaches, particularly for state, local, and tribal law enforcement agencies, is also needed. As Mr. Nation explained, law enforcement officers are typically trained to perform tactical entries when responding to certain calls. However, tactical entries can cause trauma to children. Further, law enforcement officers often conduct interviews with children, but they frequently rely on traditional interrogation methods because of a lack of training on trauma-informed best practices.

Jon Zibbell, senior research public health analyst with the Community Health and Implementation Research

Program at RTI International, discussed research based on drug seizure data from Ohio that led to better detection of illicit and dangerous drugs and informed community-notification strategies that reduce harm. Specifically, Dr. Zibbell's research focused on the drug supply chain and the stages at which drug adulteration occurs. When seizures were divided out by weight (i.e., less than 1 gram, between 1 gram and 30 grams, or greater than 30 grams), patterns in adulteration emerged that might allow public safety and public health partners to understand how drugs are sold via illicit markets, how weights are designed for consumption versus for distribution, how weights determine and regulate price, and how buyer expectations influence adulteration or dilution. Dr. Zibbell found that fentanyl adulteration in cocaine and methamphetamine most often occurred in packages that weighed less than 1 gram, with little to no adulteration found in seizures of more than 1 ounce. Dr. Zibbell suggested that this may demonstrate that adulteration occurs at the lower end of the supply chain, among street-level dealers. This finding suggests that there is an opportunity for public safety and public health partners to work together to implement new drug testing and early warning programs at the individual level, based on an infectious disease model, to reduce mortality. For public health departments, this means rapidly identifying outbreaks; monitoring drug seizure trends; and tracking risk factors, demographic shifts, and geographic patterns. For law enforcement agencies, this involves rapid testing and turnaround (i.e., within 3 to 6 months) of evidence from overdose scenes. Dr. Zibbell suggested that law enforcement data play a key role in studying the characteristics of drug markets. Drug seizure data, in particular, describing bag sizes, bag contents, and seizure locations, can be used as a proxy for trends in the illicit drug supply. Importantly, efforts are needed to speed up data availability, improve data sharing, and standardize data formats.

Andrea Darr, director of the West Virginia Center for Children's Justice, gave a presentation on the Handle With Care (HWC) program,<sup>11</sup> which is dedicated to ensuring that



children who are exposed to trauma, such as violence or substance misuse, receive the appropriate interventions to allow for success in school. In West Virginia, for example, Ms. Darr reported that of children removed from their homes, more than 8 in 10 are removed as a result of substance misuse by their parents. In many cases, grandparents, who may have chronic health conditions, fixed incomes, or difficulty navigating school or criminal justice systems, become primary caretakers. Trauma can undermine the ability to learn, form relationships, and function appropriately in the classroom. ACEs can result in risky health behaviors, chronic conditions, and potentially early deaths. As such, HWC represents a proactive effort to facilitate communication between law enforcement agencies and schools following police encounters with children at crime scenes. After these encounters, police identify and send notices to schools; schools then prepare trauma-sensitive support for kids, and mental health partners provide on-site therapy. For many children, schools are a safe place, and trauma-sensitive programs provide an opportunity for traumatized children to forge relationships with adults in a supportive, predictable, and safe environment. This allows teachers to be proactive instead of reactive, supports the children and school staff, and increases awareness of services. No details of the event are recorded in the law enforcement notices, and the notices are not recorded in students' permanent records. In 2019, law enforcement agencies provided 1,544 notices affecting 2,029 children. The number of reports to Child Protective Services dropped in 2020 due to the COVID-19 pandemic, and law enforcement agencies were reminded that they needed to continue to send notices even though schools were closed to ensure that the children could be tracked and that children could continue to have access to needed services.

Kimberly Coleman, chief of staff of the Pennsylvania Department of Drug and Alcohol Programs (DDAP), offered a state-level perspective on efforts to mitigate the growing problem of stimulants. In Pennsylvania, drug seizure data have shown increasing availability of methamphetamine

since 2014 (although cocaine seizures have fluctuated during this time). Further, data on treatment admissions have shown a growing number of individuals seeking care for stimulant use disorder in recent years. In response, DDAP has implemented several initiatives. Beginning in 2019, the regional HIDTA began convening stakeholders for an annual psychostimulant symposium to discuss the growing program and share best practices. Pennsylvania has also expanded state opioid response grants to include stimulants in recent years. Ms. Coleman described another DDAP initiative that included the development of a web-based tool in early 2021 called Addiction Treatment Locator, Assessment, and Standards (ATLAS), a trusted resource for people to identify services.<sup>12</sup> The tool triangulates and validates sources of data, identifies appropriate treatment options, and helps providers benchmark and improve the quality of services. Ms. Coleman also discussed other efforts around the state, such as the Law Enforcement Treatment Initiative,<sup>13</sup> a program that helps people seeking treatment access services through law enforcement deflection programs without the threat of arrest. The Bucks County Connect. Access. Refer. Engage. Support (BCARES) program<sup>14</sup> in Pennsylvania facilitates "warm handoffs" of individuals seeking treatment to hospital emergency departments, where a certified recovery specialist can meet with them face-to-face to provide services; BCARES also provides support to families of individuals entering treatment. Similarly, the Blue Guardian program<sup>15</sup> is a partnership between law enforcement and social services to help individuals and their families who are struggling to gain access to addiction treatment.

## Panel 2 Discussion

The Panel 2 discussion addressed questions related to data collection and sharing, drug adulteration, and ways to address stimulants in the face of treatment limitations. One participant asked for data on HWC initiations and the frequency with which children were exposed to trauma. Ms. Darr stressed the importance of developing clear data definitions for stakeholders. For example, when HWC was originally developed, law enforcement officers were

instructed to inform schools when they thought a child had experienced trauma. However, this approach was problematic, because everyone defines trauma differently, and law enforcement officers may often believe that trauma requires a significant event. Further, data collection, particularly in rural communities, can be difficult, because everyone knows each other. In West Virginia, officers would simply contact teachers directly about children they know rather than filing a formal notification, which would be captured in a database. As noted, Ms. Darr reported 1,544 law enforcement notifications affecting 2,029 children in 2019. Going forward, HWC is developing a website with an online tool for creating notices to ensure that tracking can be maintained.

Participants were also concerned about how drug seizure data are affected by the percentage of drugs seized versus the percentage of those not seized. Dr. Zibbell suggested that this was difficult to determine but explained that the better question is whether drug seizure data can act as a proxy for illicit drug markets. Although there are contributing factors that are related to the drug seizure numbers, the data are often collected regularly for some time in a standardized format, which allows for monitoring drug market trends. A particular drug being seized in high quantities might indicate high market availability. Dr. Zibbell provided an example from 2013, when fentanyl seizures skyrocketed. Although these seizures were not an indication of how much fentanyl was in the drug markets, the data did indicate that supply was substantial.

Panelists also responded to queries about the adulteration of stimulants with fentanyl, noting that, as a general trend, methamphetamine containing fentanyl is becoming an increasingly larger problem and has been observed in toxicology data in states such as Nevada and Ohio. As Dr. Zibbell explained, adulteration typically occurs at the street level, but the reason for that is not fully understood. Dr. Zibbell suggested various reasons, from purposefully adulterating methamphetamine with fentanyl to make it more addictive and to increase sales to the “sloppy dealer thesis,” whereby street-level dealers are accidentally cross-

contaminating substances when they are prepared in small quantities for local distribution. Law enforcement could likely find ways to prevent adulteration, because it is not typically happening during production.

Finally, panelists offered other general advice for responding to the growing stimulant problem in light of the lack of a viable treatment solution. Dr. Zibbell, noting that cocaine tends to be problematic in urban areas and methamphetamine in rural areas, suggested the need for a more nuanced conversation about stimulants that can inform interventions that are specifically tailored to the problems faced by different people in different places. Developing messaging and outreach strategies that are responsive to the social, cultural, and economic differences of the area is important for successfully getting resources to people, he said. In addition, Ms. Darr advocated for the greater availability of free, easily accessible resources for stakeholders to use when developing responses to stimulant use disorder. Ms. Coleman suggested the use of more holistic approaches that include case management and recovery support with a broader array of services, such as housing and workforce development.

### **Panel 3: Community Relations**

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Communities are key stakeholders that must be involved in any effort to overcome the overdose crisis. The public relies on public safety and public health leaders for information about substance misuse in their communities, and public safety and public health partners rely on the public for support, resources, and information that can guide efforts to prevent and reduce substance use.

During the Panel 3 discussion on community relations, Phil Rutherford, chief operating officer of Faces & Voices of Recovery, discussed how major structural issues, such as homelessness, poverty, and concentrated disadvantage, lead to health disparities and create barriers for many

The **Community Relations** panel focused on stakeholder engagement and partnerships with the community within the context of responding to stimulant-related problems. In general, panelists discussed how to educate the community and what role the community plays in treatment and recovery from stimulant use disorder. Panelists emphasized the importance of data sharing and the involvement of peer recovery specialists, in particular. The panel was moderated by Jac Charlier, executive director of the TASC Center for Health and Justice, and included the following four presentations:

- ◀ **Faces & Voices of Recovery**—Phil Rutherford, chief operating officer, Faces & Voices of Recovery
- ◀ **Polysubstance Use and Death**—Brad Ray, professor, School of Social Work and Center for Behavioral Health and Justice, Wayne State University
- ◀ **Community Relations: San Francisco Police Department**—Michael Redmond, assistant chief, San Francisco, California, Police Department
- ◀ **Stimulating Partnerships: Community Relations for Responding to Stimulant Challenges in Iowa**—Dale Woolery, Director, Iowa Governor's Office of Drug Control Policy

individuals to obtain treatment and other social services. These structural issues compound problems, because individuals with stable footing in recovery tend to be more successful than those without. Mr. Rutherford suggested that peer recovery support services can be an effective means to help individuals with SUD successfully recover. He highlighted several Faces & Voices of Recovery initiatives that facilitate these efforts. For example, Faces & Voices of Recovery operates the National Recovery Institute, which provides training and technical assistance on peer recovery to stakeholders.<sup>16</sup> In addition, Faces & Voices of

Recovery manages the Association of Recovery Community Organizations, a nonprofit, community-based organization that supports recovery community organizations (RCOs).<sup>17</sup> Data support is provided to RCOs via the Recovery Data Platform,<sup>18</sup> a cloud-based data tool that informs evidence-based practices. Mr. Rutherford noted that there are ongoing issues related to the public stigma around stimulant use disorder, with alcohol and opioid use disorders receiving much more attention. In addition, there is often a myopic focus on singular substance use, ignoring the reality that people often manage multiple SUDs and other complex health issues at the same time. However, growing attention to the problem of stimulant use disorder and allocation of new resources present an opportunity to effectively address the problem.

Brad Ray, professor in the School of Social Work and Center for Behavioral Health and Justice at Wayne State University, spoke about findings from analyses of accidental overdose data collected in Marion County, Indiana, over the last decade through a partnership with a local coroner's office. First, Dr. Ray discovered substantial regional variation in drug use trends, suggesting the need to tailor responses to the specific problems faced in different communities. Dr. Ray also found that, although methamphetamine- and cocaine-related deaths had increased in recent years, most of the drug items involved contained an opioid as well. Although naloxone does not work for stimulant overdoses, it still has value and can save the lives of those co-using stimulants and opioids. In a follow-up study, Dr. Ray collaborated with chemists from the University of Notre Dame to use mass spectrometry to test drugs collected at the scene of an accidental overdose (Lockwood et al., 2021). They examined substances from all overdose death scenes that contained an illicit stimulant and an illicit opioid. Nearly all the heroin they tested contained fentanyl, with only a few detections of illicit stimulants and illicit opioids combined (3 out of 57 samples), and all cocaine samples contained fentanyl. Dr. Ray also stressed the importance of monitoring interventions for unintended consequences, noting, for example, that law enforcement drug seizures can sometimes

result in a spike in overdoses (Mohler et al., 2021). This happens when certain drugs that people are dependent on are taken away, and alternatives are sought; in some cases, lacking familiarity with a new dealer, individuals may take a similar amount of a more potent drug. The goal should be to prevent one substance from replacing another drug that is the target of any particular policy response.

Michael Redmond, assistant chief of the San Francisco Police Department (SFPD), described the disproportionate impact of the stimulant crisis on one neighborhood in San Francisco, known as the Tenderloin District, that has a history of high rates of homelessness, drug use, and violent crime. In response, SFPD started a community relations campaign there, focusing first on methamphetamine use, then expanding to address a variety of substances as trends shifted. The task force includes 22 members across multiple disciplines, including law enforcement, medicine, public health, treatment provision, housing provision, EMS, drug policy, and lived experience. The goals of the task force are to reduce harm and health risks for people who use drugs, identify and adopt best practices for treatment, and reduce the negative social impacts of substance use. Through regular meetings, the task force focused on several key issues, including social and behavioral interventions, medical and pharmacological interventions, low-threshold services, workforce development, capacity building, public safety, and the role of the criminal justice system. Although harm reduction and treatment provision were the primary goals, enforcement remained a necessary component of the task force's response to prevent negative impacts from drug markets on drug users and community members. Assistant Chief Redmond highlighted several other programs to assist those with SUDs in San Francisco, including diversion courts, a law enforcement–assisted diversion program,<sup>19</sup> and the creation of a community justice center, where law enforcement officers can bring individuals directly to treatment and courts.

Although domestic methamphetamine production was once a major problem in Iowa, Dale Woolery, director of the Iowa

Governor's Office of Drug Control Policy, reported that nearly all clandestine laboratories have been wiped out in recent years. Yet methamphetamine continues to flow into the state from "super labs," located largely in Mexico, which has driven up use and related problems in recent years. Iowa has responded by working with community coalitions, local government stakeholders, and the media to develop educational campaigns and increase awareness of stimulant problems around the state. The state has also developed a pre-charge diversion program to connect those with SUDs to treatment. Iowa has several COSSAP-funded local and statewide programs, including, for example, a statewide opioid data dashboard and local efforts to address frequent utilizers of multiple health systems. Moving forward, the state aims to expand treatment capacity, reduce the methamphetamine supply, develop substance use prevention strategies for youths, identify medication-assisted treatment for methamphetamine and stimulant use disorders, and improve risk assessments for informed diversion and treatment placement.

### **Panel 3 Discussion**

The Panel 3 discussion began with a question about deflection programs for youth. Jac Charlier, executive director of TASC's Center for Health and Justice, recommended developing a framework for deflection that defines clinical and legal guidelines and law enforcement officers' degree of discretion. In addition, it is critical to have the right partners and to address the right audience. Regarding young people, local treatment agencies may include youth treatment, but it might not be the agencies' primary focus, so juvenile clients may not actually do well in those environments.

Panelists were also asked about strategies for communicating with the community. Dr. Ray suggested ensuring a constant line of communication with public safety partners by routinely updating them with findings. This can have a more immediate impact and better support change than simply publishing in academic journals. Mr. Woolery noted that doctors also need to be trained on emergency

departments procedures to ensure that patients who are experiencing an overdose are provided with recovery and treatment options before leaving a medical facility. Mr. Woolery also spoke about the role of the media and how they can both help and hinder community campaigns around substance use. In a 24-hour period, the media can create a lot of awareness about a situation, but if they are not providing accurate or complete information, they can also hinder the overall effort. Mr. Rutherford suggested using peer recovery support workers to help spread the word.

One participant asked the panelists how to address the unintended consequences of drug seizures. Dr. Ray discussed the value of communication among stakeholders. As an example, Dr. Ray spoke about one community where EMS workers reported a significant spike in overdose cases in the immediate area surrounding a major drug seizure (Rhodes et al., 2019). People who use drugs consequently may then obtain heroin from people they do not know; according to participants, purchasing from an unknown source more frequently results in a fentanyl-induced overdose. Similar patterns have been observed in Manchester, New Hampshire, where first responders have informally reported localized spikes in overdoses immediately following law enforcement interdiction in the local drug market (C. Hickey, personal communication). The regional HIDTA utilized this information to develop an outreach program in which law enforcement officers conduct outreach with communities a few days before a major drug seizure in an attempt to mitigate the overdose fallout of that seizure.

Instead of law enforcement pushback, the current discussion has centered on pushback from public defenders. In San Francisco, law enforcement officers have already worked on establishing a collaborative system and work closely with public defenders on overdose cases. Diversion programs seem to be accepted at the street level among beat cops. Mr. Woolery mentioned that pushback might be related to concerns that defense lawyers may be forfeiting their clients' rights or that diversion programs may give the appearance

of forfeiting their rights, but otherwise, there seems to be general buy-in from public defenders.

Finally, like the rest of the panelists participating in this workshop, the panelists listed data availability and data sharing as two of the most crucial solutions to reducing the number of overdoses. Dr. Ray primarily focused on the critical issue of missing data from jails. Currently, data do not really exist to track individuals' movement in and out of jail, which presents a significant barrier to public health responses. Assistant Chief Redmond agreed, noting that offenders released in San Francisco have reported that the release process is so stressful that, upon release, they traveled three blocks from the entrance of the jail into the Tenderloin District and immediately return to drug use. Mr. Charlier also commented that the Overdose Detection Mapping Application Program (ODMAP)<sup>20</sup> pulls data from 911 centers, generally provides real-time/almost real-time data on potential drug availability, and works across jurisdictions that use those data.

## **A Path Toward Recovery: Summary and Key Recommendations**

For over a decade, the United States has witnessed a growing epidemic of overdose deaths emerge across the country. Although historically driven by opioids, stimulants, such as cocaine and methamphetamine, have become a growing part of the problem in recent years. In response, BJA, with support from RTI International and PERF, convened a virtual meeting of diverse stakeholders, including leading practitioners and researchers, across public safety, public health, and the community to identify and discuss promising strategies for addressing stimulant use disorder and opportunities for collaboration. Expert panelists discussed innovative law enforcement-led response, broader policy initiatives, and strategies for community engagement. During the meeting, the experts identified five key recommendations for enhancing stakeholders' response to stimulant use disorder.



## Key Recommendations and Implications for the Field

On the basis of the panels and audience discussion, several key recommendations can be made to improve response to stimulant use:

### 1. Implement deflection and pre-arrest diversion programs to connect people with stimulant use disorder to treatment and other services.

- a. Involve first responder staff and mid-level managers in developing a program.
- b. Create academy and in-service training on stimulant use disorder.
- c. Ensure availability of low-barrier and immediate access to high-quality treatment.
- d. Support small and rural jurisdictions where treatment options may not be available.

### 2. Develop more robust methods to identify, track, and understand the illicit drug supply market.

- a. Data should be collected in a standardized, central location that is accessible by relevant stakeholders or easily shared.
- b. Improve the timeliness of data availability.
- c. Improve data on long-term outcomes related to stimulants.
- d. Develop policies that promote information sharing or reduce barriers to communication across stakeholders.
- e. Develop better ways to measure the effects of the illicit drug supply network.

### 3. Support research that seeks to develop medications for stimulant use disorder and strategies for stimulant-related overdoses.

- a. Support research to identify evidence-based treatment options for stimulant use disorder.
- b. Treatment options need to include telehealth options for equal access in rural areas.

### 4. Implement training on and increase community awareness of ways to address the stigma associated with substance use and addiction.

- a. Improve training for health care professionals (e.g., physicians and nurses) in caring compassionately and competently for people with SUDs.
- b. Educate the public about the science of drug dependence and how it works.
- c. Recognize that susceptibility to changes in the brain in addiction is influenced by factors outside an individual's control, including genetics or the immediate environment.

### 5. Support harm reduction-focused, community-based programs that seek to reduce the negative consequences associated with drug use.

- a. Increase access to the lifesaving drug naloxone.
- b. Increase access to syringe exchange programs that will help reduce the spread of blood-borne viruses.

First, panelists agreed that the most pressing need is to provide easily accessible treatment and recovery resources within the community for individuals with stimulant use disorder. Implementation of deflection and pre-arrest diversion programs, away from the criminal justice system and into the appropriate services, is critical for facilitating individuals' access to these services. Like addiction to

opioids, addiction to stimulants is a treatable neurological disease, and arrest can create additional issues that make recovery more difficult, such as loss of housing, employment, state and/or federal aid, and family support. Further, arrest can compound issues of stigma related to addiction and arrest. One expert panelist, Chief Magnus of TPD, described the implementation of a deflection

program, which allows self-referrals and referrals by officers in the field without the threat of arrest and immediate, low-barrier connection to a treatment provider. In addition to deflection programs, panelists discussed the importance of continuing to build and expand harm reduction efforts in policing, especially given the issues related to polysubstance use. Because it is common for individuals to co-use stimulants and opioids, harm reduction tools like naloxone and syringe exchange programs, especially with support from first responders, can be effective parts of the response to stimulants and can save lives.

Second, panelists recommended improvements around data collection and sharing among stakeholders. Expert panelists repeatedly discussed the need for improved data collection programs, and several spoke about how data sharing helped improve their response to stimulant use disorder. Data are critical for identifying problems, developing appropriate responses, and evaluating efforts. More complete, timely, and integrated data (i.e., across multiple stakeholders) around stimulant use, overdose, and other related problems can inform collaborative efforts to address the stimulant crisis. Experts recommended expanding existing data collection efforts by identifying and implementing new policies or practices (e.g., data sharing agreements) that ensure that data are collected in a standardized way that is easily understood and accessible to diverse stakeholders. It is also important to improve the timeliness of data, which can sometimes take months or years to become available. Finally, panelists noted the need for data on downstream outcomes related to stimulant use disorder so that interventions can be evaluated for effectiveness.

Finally, the expert panelists explained that it is imperative to support efforts to develop pharmacological treatments for stimulant use. Although there are no FDA-approved medications to treat stimulant use disorder, in-progress clinical trials show promising results (Ronsley et al., 2020).<sup>21,22</sup> In addition, unlike naloxone for the treatment of an opioid overdose, no medications can reverse an overdose involving stimulants. As these treatments are studied, other evidence-

based approaches should be implemented or expanded. These approaches include behavioral interventions, such as CM and CBT, as well as harm reduction strategies, such as syringe exchange programs. Panelists also suggested greater use of peer recovery support specialists, as well as expansion of wraparound services.

For additional information about these recommendations or public safety and public health partnerships to address the rise in stimulant use, please contact Nick Richardson ([nrichardson@rti.org](mailto:nrichardson@rti.org)) at RTI International and Jeremy Barnum at PERF ([jbarnum@policeforum.org](mailto:jbarnum@policeforum.org)).

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## Endnotes

1 <https://bja.ojp.gov/program/cossap/overview>

2 <https://www.cossapresources.org/>

3 <https://www.cossapresources.org/Program/TTA>

4 The original program, Comprehensive Opioid Abuse Program, was then expanded in 2020 to include stimulants and other substances and was renamed the Comprehensive Opioid, Stimulant, and Substance Abuse Program. The program's goals are to promote and support access to treatment and recovery for those facing addiction while in the criminal justice system, strengthen the collection and sharing of data across systems, align and maximize resources across systems, and prevent the use and misuse of illicit substances.

5 Through the collection of drug analysis results from local, state, and federal crime laboratories, NFLIS-Drug is able to provide supply-side indicators and identify trafficking and abuse patterns, emerging drugs and their availability, and changes in indicators of drug patterns geographically over time. The data comprise the results of tests from crime laboratories in all 50 states, representing 282 laboratories and 98 percent of the drug-related caseload nationally. As such, NFLIS-Drug, along with the CDC, has been largely responsible for identifying the trends occurring throughout the overdose epidemic through an annual report of findings from the previous year's drug analyses.

6 Some of these medications include antidepressants (Chan et al., 2019a, 2019b; Pani et al., 2011; Torrens et al., 2005), disulfiram (Pani et al., 2010), dopamine agonists (Chan et al., 2019a; Minozzi et al., 2015a), antipsychotics (Alvarez et al., 2013; Chan et al., 2019a, 2019b; Indave et al., 2016; Kishi et al., 2013), anticonvulsants (Alvarez et al., 2010; Chan et al., 2019a, 2019b; Minozzi et al., 2015b), topiramate (Chan et al., 2019a, 2019b; Singh et al., 2016), psychostimulants (Bhatt et al., 2016; Castells et al., 2016; Chan et al., 2019b; Pérez-Mañá et al., 2011, 2013), modafinil (Sangroula et al., 2017), methylphenidate (Chan et al., 2019b; Dürsteler et al., 2015), opioid agonists (Castells et al., 2009), and N-acetylcysteine (Echevarria et al., 2017).

7 Systematic reviews of many of these treatment options point to nonsignificant results or low data quality across studies (e.g., questionable effect sizes due to small samples or incomplete datasets [Harada et al., 2018]), thus failing to establish the efficacy of medications to treat stimulant use disorder. Nevertheless, the use of psychostimulant treatment draws on rationale from evidence-based treatments related to nicotine replacement (Ronsley et al., 2020).

8 [https://www.cossapresources.org/Content/Documents/Articles/CHJ-TASC\\_Nation\\_Survey\\_Report.pdf](https://www.cossapresources.org/Content/Documents/Articles/CHJ-TASC_Nation_Survey_Report.pdf)

9 <https://acestoohigh.com/2017/05/02/addiction-doc-says-stop-chasing-the-drug-focus-on-aces-people-can-recover/>

10 [https://www.tn.gov/content/dam/tn/mentalhealth/documents/FINAL\\_-\\_SU\\_Best\\_Practice\\_Tool\\_Guide.pdf](https://www.tn.gov/content/dam/tn/mentalhealth/documents/FINAL_-_SU_Best_Practice_Tool_Guide.pdf)

11 <http://www.handlewithcarewv.org/handle-with-care.php>

12 [https://www.indianagazette.com/news/overdose-deaths-persist-amid-pandemic/article\\_809b2c21-f018-55f1-8bbf-910ac9727c6f.html](https://www.indianagazette.com/news/overdose-deaths-persist-amid-pandemic/article_809b2c21-f018-55f1-8bbf-910ac9727c6f.html)

13 [https://www.attorneygeneral.gov/wp-content/uploads/2019/02/treatment\\_guide\\_web.pdf](https://www.attorneygeneral.gov/wp-content/uploads/2019/02/treatment_guide_web.pdf)

14 <https://www.bchip.org/bucks-county-connect-assess-refer-engage-support-bcares/>

15 [https://www.pennlive.com/opioid-crisis/2018/07/blue-guardians\\_make\\_follow-up.html](https://www.pennlive.com/opioid-crisis/2018/07/blue-guardians_make_follow-up.html)

16 <https://facesandvoicesofrecovery.org/services/nri/>

17 <https://facesandvoicesofrecovery.org/services/arco/>

18 <https://facesandvoicesofrecovery.org/rdp/rdp-fact-sheet/>

19 <https://www.leadbureau.org/>

20 <http://www.odmap.org/>

21 <https://www.nih.gov/news-events/news-releases/combo-treatment-methamphetamine-use-disorder-shows-promise-nih-study>

22 <https://www.drugabuse.gov/publications/research-reports/methamphetamine/what-treatments-are-under-development-methamphetamine-use-addiction>

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