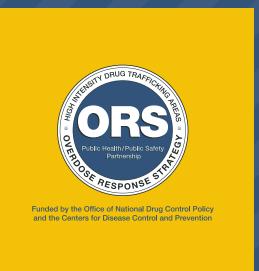
# A REVIEW OF PUBLIC SAFETY, PUBLIC HEALTH, AND HARM REDUCTION RESOURCES ON STIMULANTS

# The 2021 Overdose Response Strategy Cornerstone Report



# **Contents**

l.	PROJECT OVERVIEW	4
II.	PROJECT METHODS	7
III.	PROJECT RESULTS	9
	Resource Characteristics	
	Resource Gaps	
	Stigma and Other Harms	16
IV.	RECOMMENDATIONS	19
V.	RECOMMENDED RESOURCES	21
VI.	RFFFRENCES	24

SECTION

# Project Overview

# The Overdose Response Strategy's Cornerstone Projects

The Overdose Response Strategy (ORS) is an unprecedented and unique collaboration between public health and public safety, created to help local communities reduce drug overdoses and save lives by sharing timely data, pertinent intelligence, and innovative strategies. The ORS is implemented by teams made up of Drug Intelligence Officers (DIOs) and Public Health Analysts (PHAs) who work together on drug overdose issues within and across sectors, states, and territories. The ORS is funded by the Centers for Disease Control and Prevention (CDC) and the Office of National Drug Control Policy's High Intensity Drug Trafficking Areas (HIDTA) program.

Each year, the ORS undertakes a Cornerstone Project to answer common questions and address shared informational needs to improve understanding of and response to the overdose crisis. To date, the following Cornerstone Projects have been completed:

2016

The presence and status of fentanyl analogs 2017

Law enforcement knowledge, understanding, and experience implementing 911 Good Samaritan laws **2018** 

Public safetyled programs that link people with opioid use disorder (OUD) to evidencebased care 2019

Implementation of evidence-based overdose prevention services in jails

# **Project Rationale**

Seizures of stimulant drugsi and stimulant-related deaths are on the rise.1,2 From 2013 to 2019, rates of overdose deaths involving cocaine and other stimulants with abuse potential increased 206% and 317%, respectively.3 In addition to overdose, harmful effects of stimulant use can include nausea. dizziness, hypertension, seizure, and panic.4-6 In their role as first responders, public safety personnel (i.e., police, fire, and emergency medical services [EMS]) increasingly interact with people who use stimulants. Likewise, public health and harm reduction increasingly serve people who use stimulants. Accordingly, personnel in all three sectors need information on the effects of stimulant use, serving people who use stimulants, and reducing risks among people who use stimulants.

To that end, a review of the available information on stimulants currently disseminated and used by public health, public safety, and harm reduction agencies was conducted. Resources in any format used internally by agencies or available in the public domain that reference stimulant drugs were included. See the text box for detailed information on included resources.

In 2020, the ORS did not conduct a Cornerstone Project due to the reallocation of resources within public safety and public health agencies to meet the needs of the COVID-19 pandemic. The 2021 Cornerstone Project examines **existing** resources on stimulants available from **public health**, **public safety**, **and harm reduction agencies**.

Stimulant drugs increase levels of certain neurotransmitters in the brain, producing increased alertness, energy, and euphoria. Common examples include cocaine, methamphetamine, and amphetamines.

# **Project Objectives**

This project aims to improve the ability of public safety, public health, and harm reduction to safely and effectively address the needs of people who actively use stimulants who are at higher risk of overdose and potentially most in need of harm reduction and treatment services. Specifically, the project seeks to:

- Understand the scope of available information on stimulants.
- Identify useful resources for wider dissemination and resource gaps that can be addressed through future ORS work.
- Identify language that can be stigmatizing or otherwise harmful
- Make recommendations that support the development, dissemination, and use of comprehensive, nonstigmatizing resources.

While this project focuses on the needs of people who use stimulants, primary prevention, or preventing stimulant use before it begins, is a key strategy to prevent overdose, stimulant use disorder, and other adverse health effects of stimulants. Education about stimulants and their associated risks can be used to prevent stimulant use initiation. While primary prevention is a vital drug control strategy, harm reduction, treatment, and recovery are equally important for saving lives, particularly for individuals for whom primary prevention or early intervention is no longer possible. The 2022 National Drug Control Strategy includes primary prevention, harm reduction, treatment, and recovery among its top priorities. Data analysis for this project thus focuses on where existing resources fall within these four strategies.

# What types of resources were reviewed?

\_\_\_\_\_

For the purposes of this project, resources on stimulants were defined as any material (e.g., pamphlets, trainings, slide decks, videos) that provides information on stimulant drugs, stimulant use, responding to people using stimulants or experiencing stimulant-involved overdose, and/or programs or services for people who use stimulants (e.g., diversion, deflection, post-overdose outreach, linkage to care). In other words, all materials explicitly referenced stimulants in some way, even if they also discussed other drugs.



# **Project Methods**

# **Project Methods**

Data collection was carried out from August to October 2021 in the 39 U.S. states and territories with ORS PHAs and DIOs available at the time. See Figure 1.

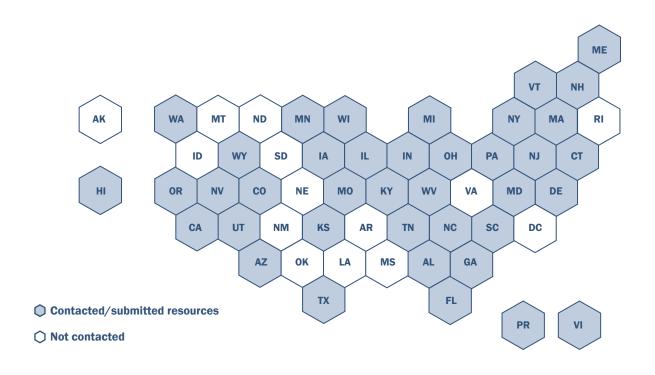
ORS PHAs and DIOs completed the following steps with CDC support:

- Contacted public safety, public health, and harm reduction agencies in their state or territory to request access to stimulant resources they had developed, acquired, disseminated, or used
- Obtained resources
- Catalogued resources (e.g., by agency type, format, purpose, intended audience, topics covered)
- Identified resource gaps and use of stigmatizing language

#### **ACKNOWLEDGEMENTS**

The authors wish to thank the PHAs and DIOs within the ORS for completing the steps associated with this project. We also thank members of the CDC ORS team, ORS management team, ORS Executive Committee, PHA/DIO Advisory Group, and wider ORS community for providing feedback on this project and report. Finally, we are grateful to the agencies that kindly agreed to share stimulant resources to be analyzed for this project.

Figure 1: Participating U.S. States and Territories





# **Project Results**

#### **Resource Characteristics**

# **Agency Type**

The 169 submitting agencies were categorized into four types:

- Public health: health departments, substance use prevention, treatment, and recovery programs, and others with a public health mandate
- Public safety: police, fire, EMS, and others with a public safety mandate
- Harm reduction: syringe services programs and others that aim to reduce harms associated with substance use, excluding prevention, treatment, and recovery programs
- 4 Research: research and academic institutions

Over half of resources (52%) were from public health, as shown in Figure 2A.

#### **Resource Format**

Among the 376 resources received, five formats were identified:

- 1 Website: homepages or specific webpages
- Video: promotional videos or recorded presentations or conferences
- 3 Slide deck: presentation slides
- 4 Handout: pamphlets, fact sheets, window decals, or other short-form informational documents
- 5 Other material: resource guides, lesson plans, reports, course curricula, or other long-form informational documents

In some cases, resources in the video, slide deck, handout, and other material categories were available online.

Nearly half of resources (45%) were handouts, as shown in Figure 2B.

# **Quick Summary**

**unique agencies** were contacted for this project in **39 U.S. states and territories**.

\_\_\_\_

- agencies (32%) submitted at least one resource.
- **376** resources were included in the analysis.

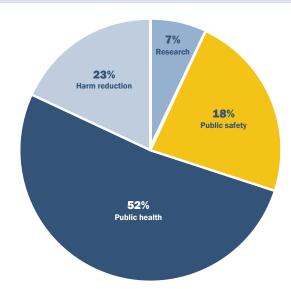


Figure 2A: Resources by Agency Type

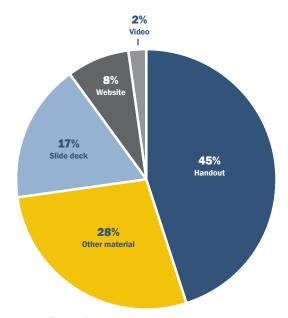


Figure 2B: Resources by Format Type

# **Resource Purpose**

We determined the purpose of each resource, or what the resource aims to achieve, based on descriptions provided by submitting agencies, or in the absence of that information, by the content. We identified four purposes:

- 1 Raise awareness: resource provides information, excluding information about specific programs and how to provide treatment
- 2 Train: resource teaches a skill or strategy, excluding how to provide treatment
- Guide provision of substance use disorder (SUD) treatment: resource describes how to provide treatment
- 4 Promote program: resource promotes a specific program

Most resources (77%) were to raise awareness, as shown in Figure 2C.

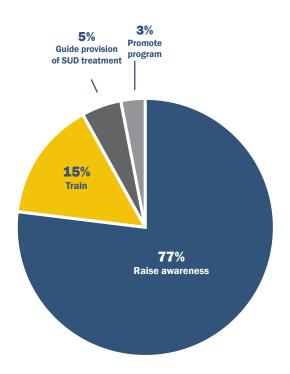


Figure 2C: Resources by Purpose

### **Intended Audience**

The intended audience of each resource, or who the resource is meant for, was identified using the same strategy as above. Three audiences were identified:

- 1 People who use drugs
- 2 First responders (i.e., police, fire, and EMS) and service providers (i.e., treatment and harm reduction providers)
- 3 General public

Over half of resources (54%) were intended for the general public, as shown in Figure 2D.

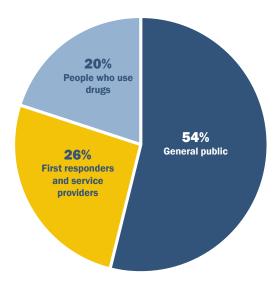


Figure 2D: Resources by Intended Audience

# **Topics Covered**

Four topics of public health significance related to stimulants and stimulant use were identified. Resources were reviewed to identify if each covered none, one, or several of the topics. **Below are the four topics:** 

- Types and effects: resource describes primary prevention strategies, types of stimulants, how stimulants are used, or their effects, including dependency, overdose, and other harms.
- Treatment: resource defines stimulant use disorder or describes treatment or recovery strategies.
- **Overdose signs**: resource describes how to recognize overdose from stimulants or overamping.<sup>ii</sup>
- Harm reduction: resource describes harm reduction strategies, including how to address stimulant dependency, prevent or respond to overdose, or access harm reduction tools or services.

Most resources (62%) covered the topic of types and effects.

Percentage of resources that addressed each topic:

62% Types and effects

32% Treatment

30% Overdose signs

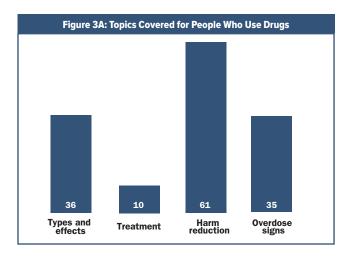
37% Harm reduction

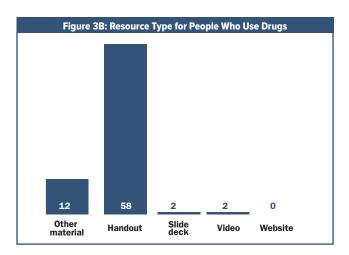
Because the word "overdose" is typically associated with opioids, and because stimulant overdose may not have the same signs, symptoms, and causes as opioid overdose, some individuals and agencies, including the National Harm Reduction Coalition, question whether "overdose" is the best word to describe what happens when stimulants lead to death or near-death complications. Instead, they propose use of the term "overamping." <sup>77</sup>

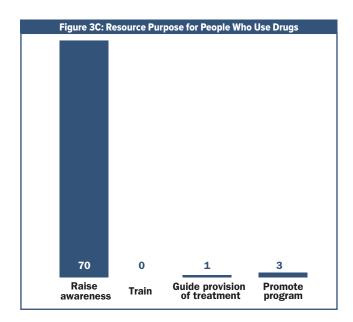
# **Resource Gaps**

This section identifies gaps that new resources could fill. Resources were grouped by their intended audience and examined. The topics covered, the types of resources collected, and the purpose of resources for each intended audience were then examined.

### **People Who Use Drugs (74 Resources)**





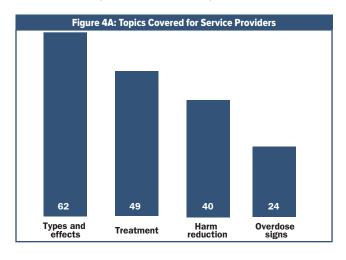


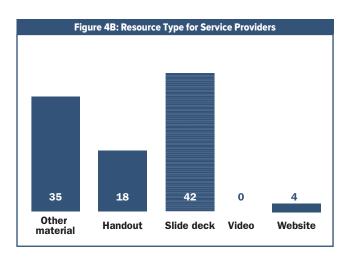
# **Gaps Identified for People Who Use Drugs:**

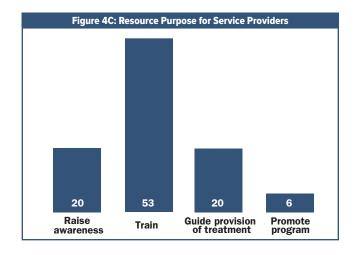
- Resources that provide information on stimulant use disorder and treatment
- Online resources rather than handouts or other material that require interaction with a provider to obtain the information
- · Videos that increase the accessibility of information
- Information on specific programs for people who use drugs
- Training on identifying and responding to overdose as a bystander

RESOURCE GAPS SECTION III

# Resources for First Responders and Service Providers (99 resources)



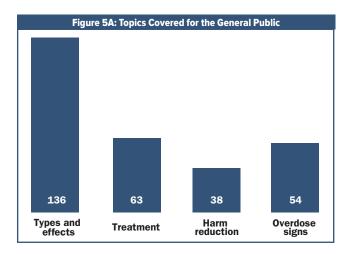


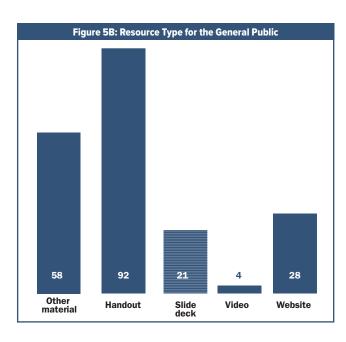


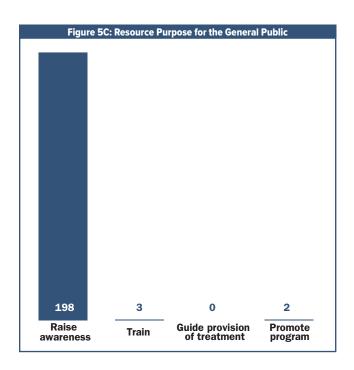
# **Gaps Identified for First Responders** and **Service Providers**:

- Websites that convey information in an interactive manner
- Videos that increase the accessibility of information
- Training on identifying and responding to overdose as a first responder or service provider
- Guidance on implementing treatment strategies for service providers
- Guidance for health departments on responding to spikes in stimulant-involved overdoses and serving people who use stimulants
- Information on specific programs to use when linking people who use drugs to care

# **Resources for the General Public (203 resources)**







## **Gaps Identified for the General Public:**

- Resources that increase general awareness of harm reduction
- Videos that increase the accessibility of information
- Information on specific programs for people who use drugs
- Training on identifying and responding to overdose as a bystander

# **Stigma and Other Harms**

Stimulant use can be harmful to health and well-being. While the precise effects are mediated by many factors, such as drug content, route of administration, the individual, and the context in which the drug is used, stimulant use at any dose level can lead to psychological, cardiovascular, respiratory, neurological, gastrointestinal, and muscular problems as well as overdose. <sup>4-6</sup> Chronic high-dose use can lead to stimulant use disorder and other potentially more serious complications. <sup>6</sup>

It is important to effectively communicate possible harms associated with stimulant use to all types of audiences. When communicating this information, it is also important to avoid language that is stigmatizing to people who use stimulants or that exaggerates or misrepresents the harm because this can undermine efforts to help people stay safe and, if possible, secure treatment and stay in recovery.

This section examines language in the collected resources that can be stigmatizing to people who use stimulants or harmful in other ways. While some of this language is also, at times, inaccurate or not sufficiently supported by evidence, an assessment of the accuracy of specific statements is beyond the scope of this project.

# To identify stigmatizing and other potentially harmful messages, each resource was reviewed to determine if it included:

- Terms or stereotypes that increase stigma associated with stimulant use.
- Messages that undermine public health and safety goals of keeping people safe and ensuring they have access to treatment and services, when needed.

# Terms that increase stigma associated with drug use include:

- Addict
- User
- Abuse/Abuser
- Habit<sup>9</sup>

# What Is Stigma?

Researchers<sup>8</sup> define stigma as the co-occurrence of four elements:

- 1 Labeling
- 2 Stereotyping
- 3 Separating labeled or stereotyped individuals from everyone else
- 4 Assigning labeled or stereotyped individuals a lower status or discriminating against them

Stereotypes that increase stigma are beliefs that individuals who use stimulants are linked to socially undesirable characteristics.8 Such beliefs increase stigma through various mechanisms.10

- They can be internalized, where people come to believe these qualities about themselves or expect others to think negatively of them, which, in turn, can adversely affect mental health<sup>11</sup> or engagement in treatment.<sup>12</sup>
- Stereotypes can also lead to discrimination, including enacted and structural forms of stigma. As an example of the former, health providers with negative attitudes toward substance use may deliver suboptimal care.<sup>13</sup>
  As an example of the latter, laws and policies may limit treatment options or other avenues for social mobility for individuals with histories of substance use.

Findings are summarized on the next page. We provide examples of stigmatizing phrases, stigmatizing terms, and other counterproductive messages, explain why they can be harmful, and suggest alternative approaches to messaging. These alternatives are included for illustrative purposes only. All messages should be developed and tested with local audiences before being circulated.

#### **TABLE 1: STIGMATIZING PHRASES**

Examples:	Why This Is Harmful:				
People who use meth only "care about the drug and getting more of it."  "Once someone is addicted to meth the only way out is usually death."	<ul> <li>Suggesting that people who use methamphetamine care only about consuming more drugs obscures the many priorities and concerns that define an individual's experience. This message also fails to recognize an individual's capacity to make rational decisions,<sup>14</sup> practice harm reduction,<sup>15-17</sup> and seek treatment.<sup>6</sup></li> </ul>				
<ul> <li>"from the start, methamphetamine begins to destroy the user's life."</li> <li>Meth "messes up your brain. Permanently."</li> <li>"Meth causes rotting teeth," also known as "meth mouth."</li> </ul>	Equating methamphetamine use with death or personal demise can generate hopelessness among individuals with stimulant use disorder and discourage them from practicing harm reduction or seeking or remaining in treatment. Such associations can also lead friends, families, health providers, first responders, and others to pity or abandon people who use stimulants or assume that treatment and recovery are impossible.				
"A 'meth monster' is someone who has a severe reaction to meth. He or she can become aggressive and violent."	The statement that methamphetamine use causes a permanent restructuring of the brain could be used as a rationale for devaluing, underfunding, or limiting access to certain evidence-based treatments for people with stimulant use disorder, such as cognitive behavioral therapy. <sup>18</sup>				
	Claims that methamphetamine use causes "meth mouth" or violence can perpetuate stereotypes that people who use stimulants are careless about personal hygiene or health or that they are dangerous. Both beliefs can make them appear undeserving of compassion and assistance. Perceptions of danger can further justify the use of force or other punitive measures directed toward this population when treatment or other types of support would be more appropriate.				
What To Say Instead:					

#### What To Say Instead

- $\bullet \quad \text{While stimulant use can be dangerous, there are options for avoiding or minimizing harm.} \\ ^{15\cdot17}$
- While there are no FDA-approved medications for the treatment of stimulant use disorder, other evidence-based treatments are available.<sup>6</sup>
- While stimulant use can have adverse health effects, practicing harm reduction or seeking treatment can allow people to lead meaningful and healthy lives.

#### **TABLE 2: STIGMATIZING TERMS**

Examples:	Why This Is Harmful:			
<ul> <li>Stimulant user</li> <li>Dependent individual</li> <li>Abuser</li> <li>Addict</li> <li>Junkie</li> <li>Meth monster</li> </ul>	<ul> <li>The terms "stimulant user" and "dependent individual" define people entirely by their use.<sup>9</sup> These terms are not usually preferred by individuals who use drugs or who are in early recovery.<sup>19</sup> They can also be demeaning because they fail to recognize the many strengths, abilities, skills, and resources that make up people's identities and experiences.<sup>20</sup></li> <li>The terms "abuser" and "addict" have strong negative bias and are associated with moral weakness and intentional recklessness.<sup>21,22</sup> The term "junkie" suggests danger, criminality, and uncontrollable behavior.<sup>23</sup> Use of these terms can perpetuate shame and treatment delays<sup>23</sup> or lead others to perceive people who use stimulants negatively,<sup>21</sup> as more deserving of blame and punishment than treatment and compassion.<sup>22</sup></li> </ul>			
	When these terms are used over person-first terms (e.g., person who uses stimulants), people tend to favor a disciplinary, authoritarian approach over a compassionate, rehabilitative one. This is at odds with the evidence on reducing harms among people who use stimulants.			
What To Say Instead:				
Person who uses stimulants				
Person with stimulant use disorder				

#### **TABLE 3: OTHER COUNTERPRODUCTIVE MESSAGES**

Examples:	Why This Is Harmful:				
<ul> <li>"Meth is one of the most addictive drugs known to humanity."</li> <li>"Meth hooks people faster than almost any other drug."</li> </ul>	<ul> <li>Fear-based messaging can inadvertently backfire and thwart community responses if it lends the impression that communities are facing an unstoppable, unsurmountable threat.</li> <li>While methamphetamine is addictive, asserting that it is the most addictive drug can lead people who use methamphetamine who do not identify with this experience to disregard other important health information related to stimulants. Worse, such claims can erode trust in the authorities that disseminate these messages.</li> </ul>				
What To Say Instead:					
Like other drugs, methamphetamine use can lead to addiction, risk of overdose, or other health consequences. Treatment and harm reduction strategies are available.					
If you are concerned about your stimulant use, talk to your health or harm reduction provider.					



# Recommendations

#### **SECTION IV**

#### **Recommendations**

- Critically evaluate what resources your agency is currently using to address stimulants:
  - Agencies are encouraged to evaluate resources using the parameters discussed in this report.
  - Resources that include stigmatizing or other harmful messages can be revised or removed from circulation.
  - ORS teams and other partners can assist with this process. <u>Find contact information for ORS teams</u> here.
- Consider using resources recommended in the below table when communicating with audiences.
- Consider developing new resources that address gaps identified by this project or relevant to your jurisdiction, for example:

For All Audiences	For People Who Use Drugs
<ul> <li>Brief informative videos for websites and other social media to increase the accessibility of information</li> <li>Training on identifying and responding to overdose</li> <li>Resources that promote specific programs for people who use drugs</li> </ul>	<ul> <li>Resources that provide information on stimulant use disorder and treatment</li> <li>Online resources</li> </ul>
For The General Public	For Service Providers
Resources that increase awareness of harm reduction	Resources that guide the provision of stimulant use disorder treatment     Resources that guide health departments in stimulant-involved overdose prevention and response

# **TAKEAWAY**

When developing new resources on stimulants, follow these best practices:

- 1 Review CDC's health communications planning strategies.<sup>24</sup>
- Work with a health communications specialist.
- Identify your audience and gear materials to them. Include representatives of that audience (e.g., people who use stimulants) in the development and testing of resources to vet concepts, messages, and terms.
- 4 Use person-first language or language chosen by the intended audience in resources to reduce stigma and associated harms.
- Include only straightforward factual information in the resource and avoid sensationalizing the information.
- 6 Include resources or actionable information specific to the intended audience.



# Recommended Resources

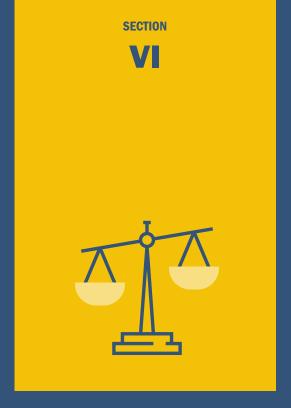
#### **RECOMMENDED RESOURCES**

One project aim is to provide resources for adaption and wider dissemination. **Table 4** outlines resources collected as part of this project that present non-stigmatizing information, organized by topic:

**TABLE 4: RECOMMENDED RESOURCES** 

	TITLE	SOURCE	FORMAT	DESCRIPTION	WHERE TO FIND IT
STIMULANT TYPES AND EFFECTS: describes primary prevention	DrugFacts	National Institute on Drug Abuse	Handout	Describes what stimulants are and how they affect the body	<u>Online</u>
strategies, types of stimulants, how stimulants are used, or their effects, including dependency,	Drug Fact Sheets	United States Drug Enforcement Administration	Handout	Describes what stimulants are and how they affect the body	<u>Online</u>
overdose, and other harms	Mind Matter Series	National Institute on Drug Abuse	Other material	Provides booklets and lesson plans for teaching teens about how stimulants affect the brain and body	<u>Online</u>
	Tips for Teens	Substance Abuse and Mental Health Services Administration	Handout	Describes the effects of stimulants and helps dispel common myths	<u>Online</u>
STIMULANT USE DISORDER TREATMENT: defines stimulant use disorder	Treatment of Stimulant Use Disorders	Substance Abuse and Mental Health Services Administration	Other material	Discusses effective practices to treat stimulant use disorders and address associated clinical challenges	<u>Online</u>
or describes treatment or recovery strategies	Integration of Care for People Who Use Stimulants into Substance Use Treatment Services	Massachusetts Bureau of Substance Addiction Services	Handout	Describes evidence- informed tools for managing stimulant use disorder in program settings	<u>Online</u>

	TITLE	SOURCE	FORMAT	DESCRIPTION	WHERE TO FIND IT
OVERDOSE SIGNS: describes how to recognize overdose from	Stimulant Overamping Basics	National Harm Reduction Coalition	Website	Describes overamping and overamping prevention and response	<u>Online</u>
stimulants or overamping	Overamping: Recognizing Signs of Stimulant Overdose	University of Missouri Saint Louis	Handout	Trains first responders in how to recognize and respond to overamping	Available through ORS
	Introduction to Stimulant Harm Reduction	Addiction Technology Transfer Center	Slide deck	Describes causes of overamping and prevention and response	Available through ORS
HARM REDUCTION: describes harm reduction strategies, including how to address stimulant dependency, prevent and respond to overdose, or access harm reduction tools or services	Good Practices for Working with Participants Who Use Crystal Meth	Toronto Drop-in Network	Other material	Trains providers in supporting people who use methamphetamine	Available through ORS



# References

REFERENCES SECTION VI

- [1] National Emerging Threats Initiative. Emerging Threats Report 2018: Status and Factors Affecting the United States. High Intensity Drug Trafficking Areas. Accessed June 2, 2022. <a href="https://beforeitstoolate.maryland.gov/wp-content/uploads/sites/34/2018/09/HIDTA-National-Emerging-Threats-Report-2018-Public.pdf">https://beforeitstoolate.maryland.gov/wp-content/uploads/sites/34/2018/09/HIDTA-National-Emerging-Threats-Report-2018-Public.pdf</a>
- [2] Kariisa M, Scholl L, Wilson N, Seth P, Hoots B. Drug Overdose Deaths Involving Cocaine and Psychostimulants with Abuse Potential — United States, 2003–2017. MMWR Morb Mortal Wkly Rep. 2019;68(17):388-395.
- [3] Mattson C, Tanz L, Quinn K, Kariisa M, Patel P, Davis N. Trends and Geographic Patterns in Drug and Synthetic Opioid Overdose Deaths — United States, 2013–2019. MMWR Morb Mortal Wkly Rep. 2021;70(6):202-207.
- [4] Richards JR, Laurin EG. Methamphetamine Toxicity. In: StatPearls. Treasure Island, FL:StatPearls Publishing; May 1, 2022. Accessed July 8, 2022. http://www.ncbi.nlm.nih.gov/books/NBK430895
- [5] Richards JR, Le JK. Cocaine Toxicity. In: StatPearls. Treasure Island, FL:StatPearls Publishing; May 1, 2022. Accessed July 8, 2022. <a href="https://www.ncbi.nlm.nih.gov/books/NBK430976/">https://www.ncbi.nlm.nih.gov/books/NBK430976/</a>
- [6] Substance Abuse and Mental Health Services Administration. Treatment of Stimulant Use Disorders. Substance Abuse and Mental Health Services Administration, National Mental Health and Substance Use Policy Laboratory. 2021; PEP21-02-01-004. Accessed June 2, 2022. https://store.samhsa.gov/sites/default/files/SAMHSA\_Digital\_ Download/PEP21-02-01-004.pdf
- [7] National Harm Reduction Coalition. What is Overamping? Stimulant Overamping Basics. 2020. Accessed April 19, 2021. <a href="https://harmreduction.org/issues/overdose-prevention/overview/stimulant-overamping-basics/what-is-overamping/">https://harmreduction.org/issues/overdose-prevention/overview/stimulant-overamping-basics/what-is-overamping/</a>
- [8] Link BG, Phelan JC. Conceptualizing Stigma. Annu Rev Sociol. 2001;27(1):363-385.
- [9] National Institute on Drug Abuse. Words Matter Terms to Use and Avoid When Talking About Addiction. National Institute on Drug Abuse. 2021. Accessed April 17, 2022. https://nida.nih.gov/nidamed-medical-health-professionals/health-professions-education/words-matter-terms-to-use-avoid-when-talking-about-addiction
- [10] Tsai AC, Kiang MV, Barnett ML, et al. Stigma as a Fundamental Hindrance to the United States Opioid Overdose Crisis Response. PLOS Medicine. 2019;16(11):e1002969.
- [11] Latkin C, Davey-Rothwell M, Yang JY, Crawford N. The Relationship between Drug User Stigma and Depression among Inner-city Drug Users in Baltimore, MD. J Urban Health. 2013; 90(1):147-56.
- [12] Crapanzano KA, Hammarlund R, Ahmad B, Hunsinger N, Kullar R. The Association between Perceived Stigma and Substance Use Disorder Treatment Outcomes: A Review. Subst Abuse Rehabil. 2018;10:1-12.
- [13] Van Boekel LC, Brouwers EP, van Weeghel J, Garretsen HF. Stigma among Health Professionals towards Patients with Substance Use Disorders and Its Consequences for Healthcare Delivery: Systematic Review. Drug Alcohol Depend. 2013;131(1-2):23-35.

- [14] Kirkpatrick M, Gunderson E, Johanson C, Levin F, Foltin R, Hart C. Comparison of Intranasal Methamphetamine and D-amphetamine Selfadministration by Humans. Addiction. 2012;107(4):783-791.
- [15] Carroll JJ, Green TC, Noonan RK. Evidence-Based Strategies for Preventing Opioid Overdose: What's Working in the United States. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. 2018:1-35. Accessed April 13, 2022. https://www.cdc.gov/ drugoverdose/pdf/pubs/2018-evidence-based-strategies.pdf
- [16] Shannon K, Rusch M, Morgan R, Oleson M, Kerr T, Tyndall MW. HIV and HCV Prevalence and Gender-specific Risk Profiles of Crack Cocaine Smokers and Dual Users of Injection Drugs. Subst Use Misuse. 2008;43(3-4):521-34.
- [17] Drug Policy Alliance. What are Harm Reduction Strategies for Meth Use? Drug Policy Alliance. Published 2021. Accessed June 2, 2022. <a href="https://drugpolicy.org/drug-facts/harm-reduction-meth">https://drugpolicy.org/drug-facts/harm-reduction-meth</a>.
- [18] Hart CL, Marvin CB, Silver R, Smith EE. Is Cognitive Functioning Impaired in Methamphetamine Users? A Critical Review. Neuropsychopharmacology. 2012;37(3):586-608.
- [19] Pivovarova E, & Stein MD. In Their Own Words: Language Preferences of Individuals Who Use Heroin. Addiction. 2019;114: 1785-1790.
- [20] American Psychological Association. Guidelines for Nonhandicapping Language in APA Journals. APA Style webpage. 1992. Updated August 2020. Accessed June 2, 2022. <a href="https://apastyle.apa.org/6th-edition-resources/nonhandicapping-language">https://apastyle.apa.org/6th-edition-resources/nonhandicapping-language</a>
- [21] Ashford RD, Brown AM, Curtis B. Substance Use, Recovery, and Linguistics: The Impact of Word Choice on Explicit and Implicit Bias. Drug Alcohol Depend. 2018;189:131-138.
- [22] Kelly JF, Dow SJ, Westerhoff C. Does Our Choice of Substance-Related Terms Influence Perceptions of Treatment Need? An Empirical Investigation with Two Commonly Used Terms. J. Drug Issues. 2010;40(4):805-818.
- [23] Radcliffe P, Stevens A. Are Drug Treatment Services Only for "Thieving Junkie Scumbags?" Drug Users and the Management of Stigmatised Identities. Soc Sci Med. 2008;67(7):1065-1073.
- [24] Centers for Disease Control and Prevention. Health Communication Strategies and Resources. National Prevention Information Network, Centers for Disease Control and Prevention. Updated April 15, 2022. Accessed June 2, 2022. https://npin.cdc.gov/pages/health-communication-strategies#planning



Funded by the Office of National Drug Control Policy and the Centers for Disease Control and Prevention