The Rise of Stimulant Overdoses and Harm Reduction

ASTHO OD2A Learning Community Session

July 27, 2020
Agenda

3:00 PM – 3:05 PM
Welcome & Introductions

3:05 PM – 3:25 PM
Harm Reduction and Stimulants: What do we know?
Sheila Vakharia, Drug Policy Alliance

3:25 PM – 3:45 PM
Methamphetamine in Iowa: A Public Health Approach
Michele Tilotta & Katie Bee, Iowa Department of Health

3:45 PM – 4:00 PM
Q&A Round and Discussion

4:00 PM
Closing
Learning Objectives

• Discuss national trends in stimulant use data.
• Review harm reduction efforts for stimulants.
• Identify current prevention and treatment approaches through a public health lens.
• Identify the impact of methamphetamine and Iowa’s strategic efforts to address those impacts.
Sheila P Vakharia, PhD, is Deputy Director of the Department of Research and Academic Engagement for the Drug Policy Alliance. In that role, she helps DPA staff and others understand a range of drug policy issues while also responding to new studies with critiques and analysis. She plans conferences and convenings on cutting edge issues in the area of drugs, drug research, and harm reduction. Additionally, she is responsible for cultivating relationships with researchers from a wide range of disciplines aligned with DPA's policy interests and working to mobilize academics in service of DPA policy campaigns. Prior to joining DPA, Dr. Vakharia was an Assistant Professor of Social Work at Long Island University and had also worked as a clinical social worker in both abstinence-only and harm reduction settings.
Harm Reduction and Stimulants: What do we know?

Sheila P. Vakharia PhD MSW
Deputy Director
Department of Research and Academic Engagement
Stimulants most widely used class of illicit drugs after marijuana

Figure 10. Past Year Illicit Drug Use among People Aged 12 or Older: 2018

Rx = prescription.
Note: The estimated numbers of past year users of different illicit drugs are not mutually exclusive because people could have used more than one type of illicit drug in the past year.
People use stimulants for many reasons
Theories of Problematic Use & Addiction

Dislocation Theory of Addiction (Alexander)
“The opposite of addiction is not sobriety; the opposite of addiction is social connection” Johann Hari

Self-Medication Hypothesis (Khantzian)
The use of substances to quell underlying mental health problems, stress, trauma, or pain

Behavioral/Reinforcement Theories
Positive reinforcement a driver for ongoing use despite consequences

Biological Theories
Neurotransmitter systems - rewarding effects and compulsive use
Special Subpopulations Impacted

- People who are experiencing homelessness,
- Men who have sex with men,
- Trans and cis women,
- College students and young adults,
- People who inject drugs,
- People on methadone maintenance treatment, and
- Sex workers.
Special Considerations

• Social Determinants are an important factor
  – Unmet physical needs can drive use which may be adaptive

• Greater Sensitivity to Gender Identity and Sexuality
  – Transphobia, homophobia, and sexism can drive use

• Social Norms influence Use
  – Expectations, pressures, and positive reinforcement can impact use
What are the risks associated with use?

- Physical, Psychological and Cardiovascular Effects
- “Overamping”
- Risky Injection Practices
- Sexually Transmitted Infections
Growing role in OD deaths in US

Based on data available for analysis on: 6/8/2020

Select Jurisdiction
United States

Select specific drugs or drug classes
Multiple values

Figure 2. 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: United States

Legend for Drug or Drug Class

- Reported Value
- Predicted Value

- Opioids (T40.0, T40.1, T40.2, T40.3, T40.4, T40.5, T40.6)
- Heroin (T40.1)
- Natural & semi-synthetic opioids (T40.2)
- Synthetic opioids, excl. methadone (T40.4)
- Methadone (T40.3)
- Cocaine (T40.5)
- Psychostimulants with abuse potential (T30.6)

NOTES: Reported provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be considered comparable with final data and are subject to change. Predicted provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see Technical notes). Deaths in this report are classified by the reporting jurisdiction in which the death occurred and include foreign residents. Number of deaths in this report may not match final reported data, which are reported by the jurisdiction of residence and are limited to US residents. Jurisdictions are selected for inclusion in this dashboard if they have met the original three measures of data quality (i.e., (a) overall percent completeness of reporting ≥ 90%, (b) the percentage of records pending investigation ≥ 1%, and (c) the percentage of overdose deaths with drug specified ≥ 80%) for the six most recent 12-month ending periods as opposed to the entire period starting with January 2016. For jurisdictions not meeting quality measures for all periods starting with January 2015, predicted values are shown for all data points that meet percent completeness and drug specificity thresholds with reported values only shown for months where all three data quality measures were met. As a result, estimates are shown for selected reporting periods before the most recent 6 months and there may be gaps in the trends. Drug overdose deaths are identified using ICD-10 underlying cause-of-death codes: T40.0-X44, X60-X84, X95, and Y10-Y14. Drug overdose deaths involving selected drug categories are identified by ICD-10 multiple cause-of-death (MCOD) codes: heroin, T40.1; natural and semi-synthetic opioids, including drugs such as oxycodone, hydrocodone, and morphine, T40.2; methadone, T40.3; synthetic opioids, including drugs such as fentanyl and buprenorphine and including methadone, T40.4; cocaine, T40.5; and psychostimulants with abuse potential, including drugs such as methamphetamine, T30.6. Opioid overdose deaths are identified by the presence of any of the following MCOD codes: opium, T40.0; heroin, T40.1; natural and semi-synthetic opioids T40.2; methadone, T40.3; synthetic opioids, T40.4; or other and unspecified narcotics, T10.6. Two other categories are included: natural, semi-synthetic, and synthetic opioids, including methadone (T40.2–T40.4; methadone, T40.3; synthetic opioids, T40.4; and natural and semi-synthetic opioids, including methadone (T40.2–T40.3). These categories can be selected in the "Select specific drugs or drug classes" drop-down menu above the chart. Categories are not mutually exclusive because deaths may involve more than one drug. Among deaths with an underlying cause of drug overdose, the percentage with at least one drug or drug class specified was determined using MCOD codes in the range of T30–T10.9.
Methamphetamine most involved in West

Based on data available for analysis on: 6/8/2020

Select Jurisdiction
Nevada

Based on data available for analysis on: 6/8/2020
Select specific drugs or drug classes
Multiple values

NOTE: Reported provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be compared with final data and are subject to change. Provisional provisional counts represent estimates of the number of deaths adjusted for incompleteness reporting (see Technical notes). Deaths in this report are classified by the reporting jurisdiction in which they occurred and include foreign residents. Number of deaths in this report may not match final reported data due to differences in classification and quality of data.

Legend for Drug or Drug Class

Based on data available for analysis on: 6/8/2020
Select Jurisdiction
Oregon

Based on data available for analysis on: 6/8/2020
Select specific drugs or drug classes
Multiple values

Legend for Drug or Drug Class

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Legend for Drug or Drug Class

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Legend for Drug or Drug Class
Cocaine most involved in East

Based on data available for analysis on:

6/8/2020

Select Jurisdiction
District of Columbia
Select specific drugs or drug classes
Multiple values

Figure 2. 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: District of Columbia

NOTES: Reported provisional counts for 12 month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Provisional counts may not be comparable to deaths occurring during prior time periods. The values shown may not be counted or compared with final data and are subject to change. Prohibited provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see Technical Notes). Deaths in this report are classified by the jurisdictions in which the death occurred and county/borough residents. Number of deaths in this report may not match number of death certificates filed. Reported data are made available by jurisdictions each month and may not represent all jurisdictions each month. Number of deaths in a jurisdiction may be less than 10. The number of reported deaths for the month of December may be higher than the number of reportable deaths as deaths are sometimes not reported until the following month. The number of deaths for December may be provisional and are subject to change.

Legend for Drug or Drug Class

Fentanyl (742.2) Predicted Value
Heroin (743.1) Reported Value
Naloxone (743.2)
Naloxone non-prescription (743.2) 
Naloxone with abuse potential (743.2)

Based on data available for analysis on:

6/8/2020

Select Jurisdiction
Rhode Island
Select specific drugs or drug classes
Multiple values

Figure 2. 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: Rhode Island

NOTES: Reported provisional counts for 12 month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be considered comparable with first data and are subject to change. Prohibited provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see Technical Notes). Deaths in this report are classified by the jurisdictions in which the death occurred and county/borough residents. Number of deaths in this report may not match number of death certificates filed. Number of deaths in a jurisdiction may be less than 10. The number of reported deaths for the month of December may be higher than the number of reportable deaths as deaths are sometimes not reported until the following month. The number of deaths for December may be provisional and are subject to change.

Legend for Drug or Drug Class

Oxycodone (748.3) Predicted Value
Hydrocodone (748.3) Reported Value
Methamphetamine (749.3)
Methamphetamine non-prescription (749.3) 
Methamphetamine with abuse potential (749.3)

Legend for Drug or Drug Class

Natural & semi-synthetic opioids (748.2)
Synthetic opioids, on and unspecified narcotics (748.2)
Cocaine (748.3)
Psychotherapeutics with abuse potential (748.3)
Midwest is Mixed

Based on data available for analysis on: 6/8/2020

Select Jurisdiction: Ohio

Select specific drugs or drug classes: Multiple values

![Graph showing 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: Ohio](image)

**Legend for Drug or Drug Class:**
- Methadone (140.3)
- Synthetic opioids, excl. methadone (140.4)
- Heroin (140.3)
- Fentanyl & other synthetic opioids (140.2)
- Psychological/behaviors with abuse potential (140.4)

**Notes:** Reported provisional counts for 12-month ending periods are the number of deaths reported and processed for the 12-month period ending in the month indicated. Provisional counts may not include all deaths that occurred during the time period. Therefore, they should not be considered comparable to final data and are subject to change. Provisional provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see Technical Notes). Deaths in this report are classified by the reporting jurisdiction in which the death occurred and include foreign residents. Number of deaths in this report may not match final reported data, which can be reported by the jurisdiction of residence and are limited to US residents. Jurisdictions are selected for inclusion in the database if they meet the following criteria: We estimate that the distribution of death certificate, AO4, AO4, AO4, AO4, and AO4, and AO4, drug overdose deaths involving selected drug categories are identified by AO4-10, multiple drugs or drug class in the form. Categories are not mutually exclusive because deaths may involve more than one drug. Among deaths with an underlying cause of drug overdose, the percentage with at least one drug or drug class specified was determined using MCCD codes in the range of AO4-10.

Based on data available for analysis on: 6/8/2020

Select Jurisdiction: Iowa

Select specific drugs or drug classes: Multiple values

![Graph showing 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: Iowa](image)

**Legend for Drug or Drug Class:**
- Methadone (140.3)
- Synthetic opioids, excl. methadone (140.4)
- Heroin (140.3)
- Fentanyl & other synthetic opioids (140.2)
- Psychological/behaviors with abuse potential (140.4)

**Notes:** Reported provisional counts for 12-month ending periods are the number of deaths reported and processed for the 12-month period ending in the month indicated. Provisional counts may not include all deaths that occurred during the time period. Therefore, they should not be considered comparable to final data and are subject to change. Provisional provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see Technical Notes). Deaths in this report are classified by the reporting jurisdiction in which the death occurred and include foreign residents. Number of deaths in this report may not match final reported data, which can be reported by the jurisdiction of residence and are limited to US residents. Jurisdictions are selected for inclusion in the database if they meet the following criteria: We estimate that the distribution of death certificate, AO4, AO4, AO4, AO4, and AO4, and AO4, drug overdose deaths involving selected drug categories are identified by AO4-10, multiple drugs or drug class in the form. Categories are not mutually exclusive because deaths may involve more than one drug. Among deaths with an underlying cause of drug overdose, the percentage with at least one drug or drug class specified was determined using MCCD codes in the range of AO4-10.
Harm Reduction Interventions for PWUS

• Safer Equipment
  – For smoking, snorting, and injecting
  – Switching route of administration is harm reduction
  – Drug checking, including fentanyl test strips

• Resources, Support, and Education
  – Food, water
  – De-escalation techniques
  – Sexual risk reduction, PrEP
  – Housing!!

• Safer Consumption Spaces
Medication Assisted Treatment

No FDA-approved medication yet
Challenges facing PWUS

- A uniquely stigmatized and marginalized population
- Opioid-centered programs
- Despite widespread use, PWUS mischaracterized
- Polysubstance use is the norm and can increase risks
- Adulterated drug supply
- Limited research
- Criminalization creates and perpetuates harms
Recommendations for Providers

• Improve the Quality and Efficacy of Services for PWUS
  – Increase training of staff
  – Challenge stigma
  – Integrate harm reduction principles into treatment settings
  – Integrate Motivational Interviewing and Contingency Management
  – Use input of PWUS in organizational planning
  – Discuss MAT and off-label prescriptions
  – Innovative strategies for outreach and engagement of hard-to-reach PWUS
  – Ensure low income people have equitable access
Thank you!

Sheila P Vakharia PhD MSW
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@MyHarmReduction
Methamphetamine in Iowa: A Public Health Approach

Speakers

**Michele Tilotta**
Substance Abuse Treatment and Prevention Block Grant and Synar Manager

**Iowa Department of Health**

Michele Tilotta, MPA, BSN, RN, works for the Iowa Department of Public Health and is a registered nurse with 35 years’ experience in nursing; including medical and behavioral health, quality improvement, management, managed care, and public health experience. Michele graduated from the University of Graceland (Iowa) with a Bachelor in Nursing Degree and from Drake University (Iowa) with a Masters of Public Administration; emphasis in HealthCare Administration. Michele currently works in the Division of Behavioral Health, Bureau of Substance Abuse, and has held various positions at the Department. Michele currently is the Substance Abuse Treatment and Prevention Block Grant and Synar Manager and serves as the Women’s Service Coordinator through the National Association of State Alcohol and Drug Abuse Directors.

**Katrina Bee**
Community Health Consultant

**Iowa Department of Health**

Katie Bee, CPS is an Iowa Department of Public Health Prevention Consultant for the Bureau of Substance Abuse. Her background in prevention includes department management, extensive community mobilization, knowledge of best practices in prevention, and campaign development. She is adept at implementing comprehensive substance abuse and problem gambling prevention programs and initiatives. She currently serves on the Iowa Department of Public Health Methamphetamine Workgroup. Mrs. Bee has spoken on the benefits of community-based prevention at the Iowa Governor’s Conference on Substance Abuse, the Midwest Conference on Substance Abuse and Problem Gambling, and the 2019 Cocaine, Meth & Stimulant Summit.
Methamphetamine in Iowa
A Public Health Approach

July 27, 2020
• Identify current prevention and treatment approaches available to Iowans through a public health lens.

• Identify the impact methamphetamine has on Iowans and the strategic prevention efforts taking place to protect and improve the health of Iowans.
Iowa Demographics
U.S. Census, 2017

Population: 3,130,869
- 90% Caucasian White
- 5.7% Hispanic or Latino
- 3.6% African American or Black
- 2.4% Asian
- 0.3% Native Hawaiian or Pacific Islander

Urban: 64.3%
Rural: 35.7%
Iowa’s Public Health Approach

- Statewide focus and priority of the Department
- Chief Health Strategist
  - Leads
  - Collaborates
  - Support Others
- Single State Authority for substance abuse located in the Health Department
- Provide health expertise and influence social determinants of health
- Strategic Planning
  - Data driven process
  - Health promotion initiatives
  - Prevention and treatment approaches
Methamphetamine in Iowa

- Methamphetamine seizures by Iowa law enforcement agencies dropped off following substantial reduction in labs 10 years ago. Risen in recent years. Increase in large shipments of high purity methamphetamine in Iowa communities.
  - 99-100% pure compared to 14-40% ten years ago

- In 2005, the Iowa Legislature passed legislation - limited availability of pseudoephedrine. In 2009, all Iowa pharmacies that sell non-prescription pseudoephedrine products over the counter participate in an electronic tracking system.
From 2014 through 2018, the rate from methamphetamine-related treatment admissions increased 50%.

Rates from 2014 to 2018, men (54%) and women (46%) were admitted at different, but increasing rates for methamphetamine treatment.

In 2018, Iowan’s enter SUD treatment with meth as primary substance at all time high of 21.7%.
In 2018, Iowans ages 25-44 had the highest rates of methamphetamine-related treatment admissions compared to other groups.

In 2018, the most frequently reported substances used by all women Iowa include:

- Marijuana (51.0%)
- Methamphetamines (50.3%)
- Alcohol (44.9%)
- Opioids, including heroin and prescription drugs (19.1%)
Overdose Data to Action: Focus on providing high quality, comprehensive, and timely data on overdose morbidity and mortality to better understand the drug overdose crisis in Iowa and to inform more effective prevention services.

Division liaison position between HIV and Behavioral Health

Promoting Integration of Primary and Behavioral Health: Full integration and collaboration in primary health care

Iowa State Opioid Targeted Response Grant: The program aims to address the opioid crisis by:

- Increasing access to medication-assisted treatment using the three FDA-approved medications for the treatment of opioid use disorder,
- Reducing unmet treatment need, and
- Reducing opioid overdose related deaths through the provision of prevention, treatment and recovery activities for opioid use disorder (OUD) (including prescription opioids, heroin and illicit fentanyl and fentanyl analogs).
Iowa’s Resources and Strategies
Methamphetamine Workgroup Strategic Plan

• Capacity building to include state partners, prevention and treatment providers, medical providers, etc.

• Education to Iowan’s- current and ongoing media and health promotion campaigns

• Distribution of Infographics and Data Briefs- Yourlifeiowa.org/other

• Analysis of data for development of health equity strategies
• Stakeholder meetings/taskforces/advisory meetings
• Community Assessment Workbooks - collaboration and participation of all community providers
• Statewide conferences
• Project Echo trainings
• Prevention services guided by the Strategic Prevention Framework
Prevention Resources
Methamphetamine Data Brief

An updated data brief was developed and issued in October 2019. This data brief highlighted the following:

- Methamphetamine-related treatment admissions;
- Increases in methamphetamine use by Iowans;
- Youth perception of risk;
- Youth access to methamphetamine;
- Methamphetamine labs seized and production of methamphetamine in the presence of a minor;
- Amphetamine-related emergency department visits and hospitalizations;
- Methamphetamine-related deaths.
GLASS ICE
CHALK CRANK
TWEAK CRYSTAL

From 2014-2017, there was a 38% increase in methamphetamine treatment admissions in IOWA.

BEFORE YOU RISK IT
GET THE FACTS
Know the risks

Meth causes brain changes that make it difficult to stop using.
Meth use can cause a "crash" after the effects wear off. Meth use can cause long-lasting damage to the brain. Meth use can trigger extreme anxiety, memory loss and severe dental problems.
High doses can elevate body temperature to dangerous, sometimes lethal, levels and cause convulsions and even cardiovascular collapse and death. Meth use may also cause extreme anorexia, memory loss and severe dental problems.

1,713,000 persons in the U.S. aged 12 years or older reported using methamphetamine.

FIND HELP NEAR YOU
Call (855) 582-8111. Text (855) 695-8398.
You can contact Your Life Iowa 24/7 with questions and concerns.
Your call/text/chat is free and confidential.

The use of methamphetamine during pregnancy carries significant risks. Research shows increased rates of premature delivery and placental abruption. Effects on babies include small size, lethargy, and heart and brain abnormalities.

Source: National Institute on Drug Abuse.

Source: Iowa Department of Public Health (Disclaimer: Based on data reported by Iowa licensed treatment programs.)
Your Life Iowa

- Single statewide 24 hour crisis line
- **Access to information, resources and help, 24/7, 365 days a year via . . .**
  - Website and Online Chat
  - Call Center (855-581-8111 and 1-800-BETS OFF)
  - Texting (855-895-8398)
- Collaboration with state mental health authority for inclusion of mental health resources.
Prevention Training

The Iowa Department of Public Health, in conjunction with state and national professionals, has hosted training webinars on prevention topics ranging from substance misuse, suicide prevention, and problem gambling. Continuing Education Credits will not be provided for viewing recorded webinars.

To view available prevention webinar recordings, click on the chosen link below.

Alcohol & Other Drugs

- Alcohol Enforcement Strategies for Iowa Communities
- Iowa's Medical Cannabidiol program
- Not Your Grandpa's Cigarette: 21st Century Nicotine Products and Cessation Services
- Opioid Prevention Strategies

Assessment & Data Sources

- Finding and Using Data Sources in Iowa: Substance Abuse Prevention Practitioners
- Measuring Media Metrics & Low-Cost Implementation of a Media Campaign
- Unpacking the IDPH Prevention Workforce Development Survey: Overview and Discussion

Capacity Building, CLAS Standards and Health Equity

- Increasing Community Coalition Impact Through Best Practice
- Increasing Community Coalition Impact Through Shared Responsibility
- Leveraging Your Leadership: Utilizing Individual Management Styles to Get the Most From Your Staff, Coalition Members, and Volunteers
Methamphetamine

What is it?
Methamphetamine is a seriously addictive stimulant and is most commonly a white, odorless and crystalline powder. Based on substance use disorder admissions and prison admissions, methamphetamine continues to be one of the primary drugs of choice in Iowa.

Side effects:
Common short term effects include increased attention and activity, decreased appetite, euphoria or "rush," rapid heartbeat and an increased body temperature. In the long term, consequences include addiction, paranoia, hallucinations, repetitive involuntary movements, brain structure changes, reductions in thinking and motor skills, memory loss, aggression, mood swings and severe dental problems.

Names:
Crank, crystal, meth, and ice are common slang terms for methamphetamines.

Resources:
- Iowa Substance Abuse Brief (June 2018) - This Iowa Substance Abuse Brief from June 2018 (Issue 6) provides information about the prevention, use and treatment of methamphetamine in Iowa.
- In The Know Zone: Amphetamine - Comprehensive site with amphetamine photos, history, statistics, street Names.
- Just Think Twice - A youth oriented site created by the DEA's Demand Reduction Program.
- Meth Awareness - A USDOJ site that includes a images of meth, meth labs, photos of users, effect on users, more.
- Methamphetamine Infographic (NEW) - An infographic highlighting current Iowa and national statistics on methamphetamine use.
- The Meth Project - The Meth Project is a large-scale prevention program aimed at reducing first-time meth use through public service messaging, public policy, and community outreach.
- Methamphetamine Radio PSA's (NEW) - Radio PSA #1 Radio PSA #2
- National Indian County Methamphetamine Initiative - There are lots of cool things about being native. Meth isn't one of them. An anti-methamphetamine ad campaign for a Native American audience.
- Tips for Teens - Methamphetamine (SAMHSA) - This fact sheet for teens provides facts about methamphetamine.
Contact Information

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Iowa Department of Public Health

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Help ASTHO evaluate
The Rise of Stimulant Overdoses and Harm Reduction
on your device now!
Thank You!
ASTHOCconnects

A virtual learning series for public health leaders.