



EMPOWER HENRICO

Preventing, Treating and
Combating Substance Use

**May 2026 Overdose Response Strategy (ORS)
Trends, Analysis & Threats (TAT) Webinar Summary**

Empower Task Force Meeting

May 21, 2026

ABOUT THE OVERDOSE RESPONSE STRATEGY (ORS)*

The ORS is a nationally coordinated, cross-sector collaboration between public health and public safety. The mission of the ORS is to help communities reduce fatal and non-fatal drug overdoses by connecting public health and public safety agencies, sharing information and supporting evidence-based interventions.

ORS Program Goals:

1. Share data systems to inform rapid and effective community overdose prevention efforts
2. Support immediate, evidence-based response efforts that can directly reduce overdose deaths
3. Design and use promising strategies at the intersection of public health and public safety
4. Support the implementation of evidence-informed prevention strategies that can reduce substance use and overdose

**ORS acknowledges that all data is shared voluntarily by data owners in advance of public release and can be preliminary and incomplete. ORS does not own or manage any of the data presented.*

May 2026 ORS-TAT Presenters

Aegis Sciences Corporation

Joshua Schrecker, Pharm.D., Senior Director, Clinical Affairs

Identifying and Reporting Emerging Drug Use Trends in Ambulatory Chronic Pain and Behavioral Health Populations

Aegis Sciences Corporation provides evidence-based, actionable insights on medication compliance and substance use through definitive testing of urine, oral fluid, or blood specimens. Sr. Director Schrecker presented an overview of emerging trends among individuals using illicit substances including those entering treatment and other clinical settings.

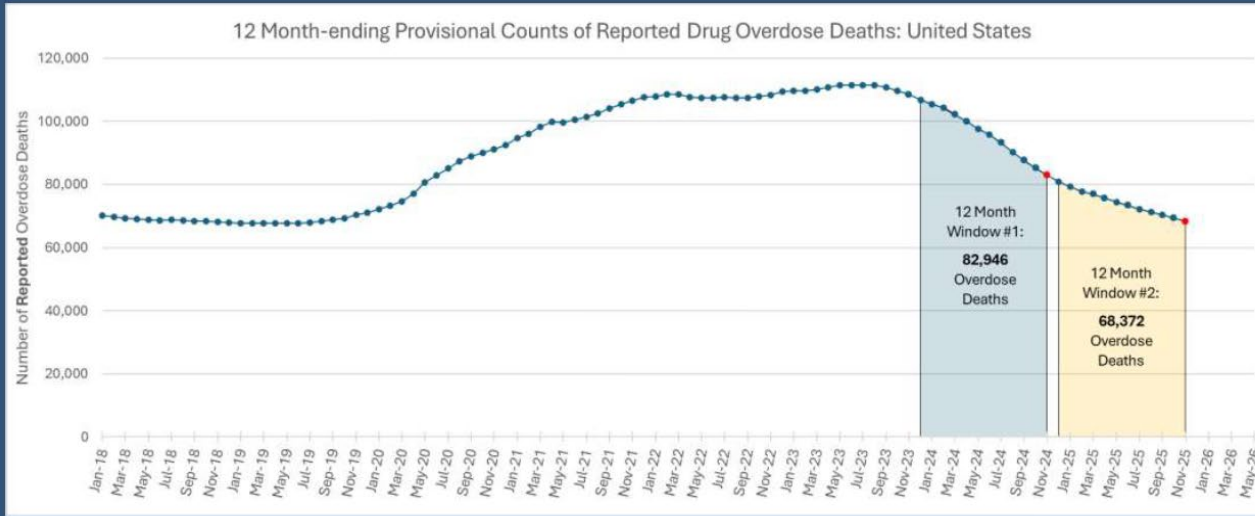
The Center for Forensic Science Research and Education (CFSRE)

Joshua DeBord, PhD, Senior Scientist

Midwest & MidAtlantic USA Drug Trends: Chemometric Analysis of Qualitative and Quantitative Data

Dr. DeBord provided an overview of CFSRE's efforts in identifying novel psychoactive substances (NPS) and monitoring drug trends to address the overdose crisis. His presentation incorporates findings from both public and private laboratories nationwide including the analysis of biological and drug samples to detect controlled substances and emerging compounds. He also highlighted how CFSRE's collaboration with public health, law enforcement, forensic science, and customs agencies tracks and understands evolving drug threats across the United States.

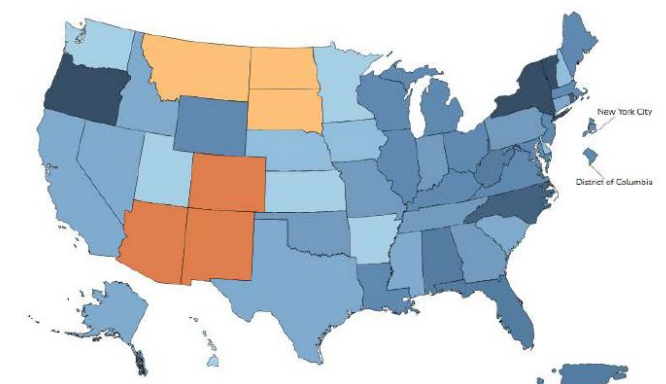
National Picture - Overdose Mortality



Percent Change for United States
-17.6

National Picture - Overdose Mortality

Figure 1b. Percent Change in Reported 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: November 2024 to November 2025



Percent Change for United States
-17.6

Legend for Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods
-41.7% to 10.1%

Based on data available for analysis on: April 5th, 2026

National Center for Health Statistics, Provisional Drug Overdose Death Counts

OVERDOSE RESPONSE STRATEGY > PUBLIC HEALTH | PUBLIC SAFETY | PARTNERSHIP

As of April 2026, reported overdose deaths declined 17% (~ 14,000 fewer deaths) for the 12-month period ending in November 2025 compared to November 2024, reflecting the continued downward trend from the 2023 peak. However, regional variation remains, with parts of the Western U.S. trending upward.

New CDC Clinical Drug Test Dashboard

Fentanyl

Increased in the West

+10.1%

The percentage of urine specimens positive for fentanyl **increased 10.1% in the West** from October–December 2024 to October–December 2025 (19.1% vs. 21.0%). [B]

Declined in the Midwest and South

-30.1%

The percentage of urine specimens positive for fentanyl **declined 30.1% in the South and 15.5% in the Midwest** from October–December 2024 to October–December 2025 (South: 8.3% vs. 5.8%, Midwest: 8.9% vs. 7.5%). [B]

National



Centers for Disease Control and Prevention. *Clinical Drug Test Dashboard*. Atlanta, GA: U.S. Department of Health and Human Services, CDC; 05 MAY 2026.

OVERDOSE RESPONSE STRATEGY



PUBLIC HEALTH | PUBLIC SAFETY | PARTNERSHIP

Fentanyl detection has declined in the Midwest and South regions by just over 30%; but increased in the West Region, up just over 10%.

POLYDRUG USE IN THE CURRENT OVERDOSE ERA

- Contemporary overdoses are predominantly polydrug events, rather than single-substance exposures
- In ED patients with suspected unregulated drug poisoning:
 - >90% had ≥ 3 concurrent drug classes
 - ~50% had ≥ 6 substances detected
- Most common combinations include stimulants + opioids + benzodiazepines, often unintentionally
- Key Trends:
 - Opioid–stimulant co-use
 - Rising detection of non-prescription benzodiazepines
 - Highly unpredictable drug supply
 - Polydrug use of substances with similar adverse effect profiles may be intentional or unintentional

Martens A, Li E, Georgi K, et al. Comprehensive toxicology testing and clinical outcomes of ED patients with unregulated drug poisoning. *CJEM*.

Published online March 30, 2026. doi:10.1007/s43678-026-01156-9

Mortensen HL, Sibley AL, Colston DC, et al. Beyond Overdose: How People Who Use Drugs Navigate Competing Risks in the Polydrug Era. *Subst Use*

Misuse. Published online February 5, 2026. doi:10.1080/10826084.2026.2621981

DESIGNER BENZODIAZEPINES

Overview:

- Designer benzodiazepines (DBZDs) are novel psychoactive substances created by chemically modifying traditional benzodiazepines to evade regulation, increase potency, or alter duration.
- First detected in Europe around 2007, with >30 compounds identified; most emerged between 2014–2020.
- Common examples in illicit markets include etizolam, clonazepam, flubromazolam, bromazolam, and flualprazolam.
- In the U.S., DBZDs are increasingly detected in overdose cases, impaired driving, counterfeit pills, and polysubstance exposures.
- DEA emergently scheduled bromazolam, one of the most frequently detected designer benzodiazepines over the last 18-24 months, in March 2026



Drug powder suspected to be alprazolam, but identified as clonazepam, in August 2022

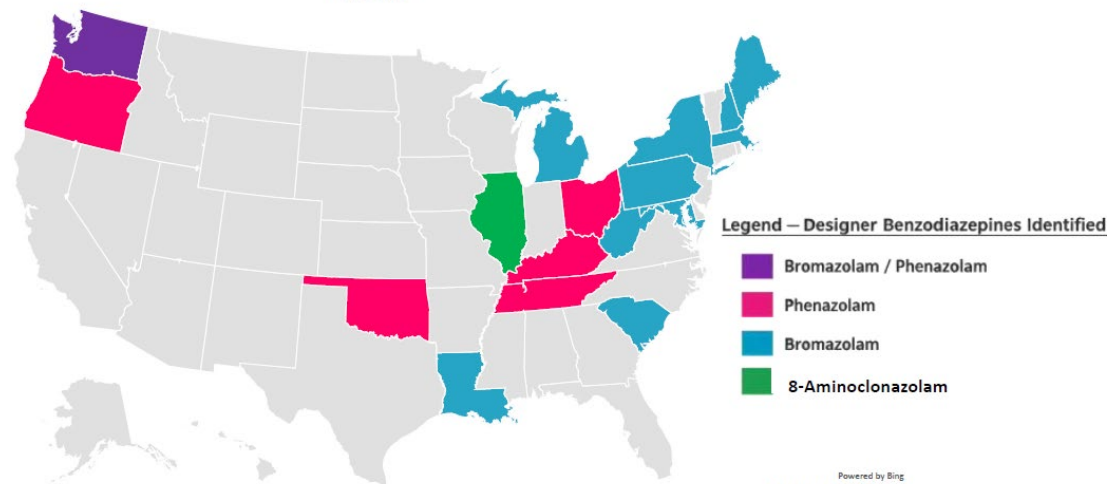
Source:
https://www.cfsre.org/images/content/reports/drug_checking/2022_Q3_Drug_Checking_Quarterly_Report_Philadelphia.pdf

Bazydlo LAL, Larkey NE. Testing Strategies and the Emergence of Designer Benzodiazepines. *Clin Lab Med.* 2025;45(2):305-314. doi:10.1016/j.cll.2025.01.013
Noe G, McDuffee N, Li K, Munjal S. Clinical Management of Designer Benzodiazepine Intoxication: A Systematic Review. *J Clin Psychopharmacol.* 2025;45(2):116-126. doi:10.1097/JCP.0000000000001963
<https://www.dea.gov/press-releases/2026/03/18/dea-emergency-schedules-bromazolam>

Designer benzodiazepines, like bromazolam and clonazepam, are being increasingly detected in overdose cases, impaired driving, counterfeit pills and polysubstance exposures.

DESIGNER BENZODIAZEPINE TRENDS

Top Designer Benzodiazepine Identified States with at least 10 Positive Samples Q12026



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NOVEL SYNTHETIC OPIOIDS

- The landscape of illicit opioids continues to evolve
 - Illicit fentanyl remains the primary driver of opioid overdose deaths in the U.S.
 - Rapid emergence of novel synthetic opioids (NSOs) has increased toxicity, unpredictability, and overdose risk
- Fentanyl-Related Substances
 - Continued presence of new fentanyl analogs despite core-structure bans
 - Different analogs = potentially different potency, naloxone responsiveness
- Non-Fentanyl NSOs: Nitazenes
 - Emerged post-fentanyl scheduling
 - Often more potent than fentanyl
 - Active metabolites extend risk window
- Non-Fentanyl NSOs: Orphines
 - Comparable potency to fentanyl
 - Evidence of partial naloxone resistance

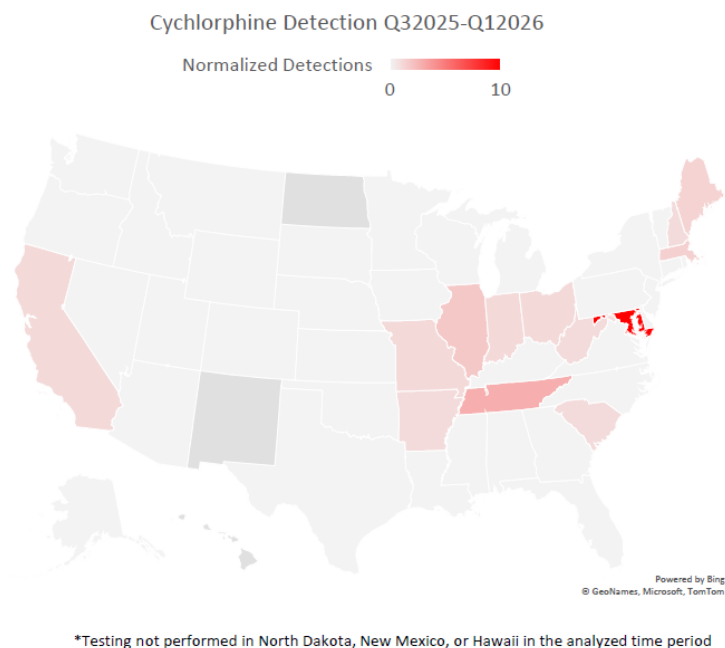
Baumann MH, Glatfelter GC, Vandeputte MM. Neuropharmacology of novel synthetic opioids (NSOs): An ever-expanding challenge for public health and safety. *Neuropharmacology*. 2026;291:110913. doi:10.1016/j.neuropharm.2026.110913

Cychlorphine is ~10x more potent than fentanyl; may require multiple naloxone doses to reverse overdose with possible need for additional emergency care and airway support.

Illicit fentanyl remains the primary driver of opiate overdoses in the US.

NOVEL SYNTHETIC OPIOIDS: CYCHLORPHINE

- Approximately 10× more potent than fentanyl based on in vitro pharmacology data.
- Cychlorphine may be ingested alongside other opioids or designer opioids, stimulants, or benzodiazepines, enhancing the risk for polydrug toxicity and overdose.
- Multiple doses of naloxone may be required to reverse an overdose, and additional emergency care and airway support may be required.
- Detections by Quarter (National)
 - Q32025: 33
 - Q42025: 88
 - Q12026: 96

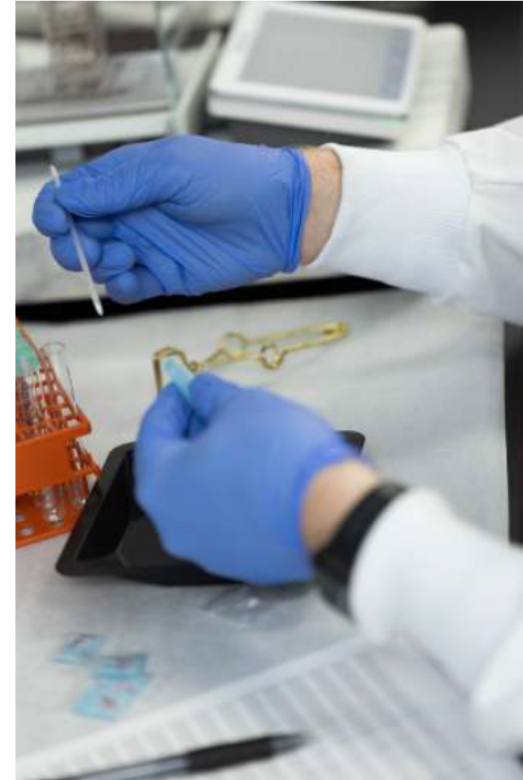


Center for Forensic Science Research & Education (CFSRE). Public Alert: N-Propionitrile Chlorphine. Published January 30, 2026. Accessed March 18, 2026. https://www.cfsre.org/images/content/reports/public_alerts/Public_Alert_N-Propionitrile_Chlorphine_013026.pdf
Sprague JE, Toms JA, Ratermann CF. Non-fatal opioid overdose associated predominantly with the benzimidazolone, cychlorphine. *Clinical Toxicology*. Published 2025. Accessed March 18, 2026. <https://www.tandfonline.com/doi/epdf/10.1080/15563650.2025.2594070?needAccess=true>

HIGH LEVEL TRENDS

[MA]=Mid-Atlantic
[MW]=Midwest

- Adulterants with Opioids - [Qualitative]
 - [MA]: Medetomidine and local anesthetics
 - [MW]: Diphenhydramine
- Synthetic Opioids - [Qualitative]
 - [MA]: carfentanil, decreasing
 - [MW]: somewhat frequent detection of nitazene analogs and orphine analogs; usually not detected by GCMS
- Relative Amounts - [Quantitative]
 - [MA]: fentanyl relative amount average ~5%, down ~50% from 2024
 - [MA]: heroin purity variable, but some very pure samples tested
 - [MW]: samples with many opioids not uncommon
 - [MW]: relative amounts of opioids are very low; <2% for most samples.

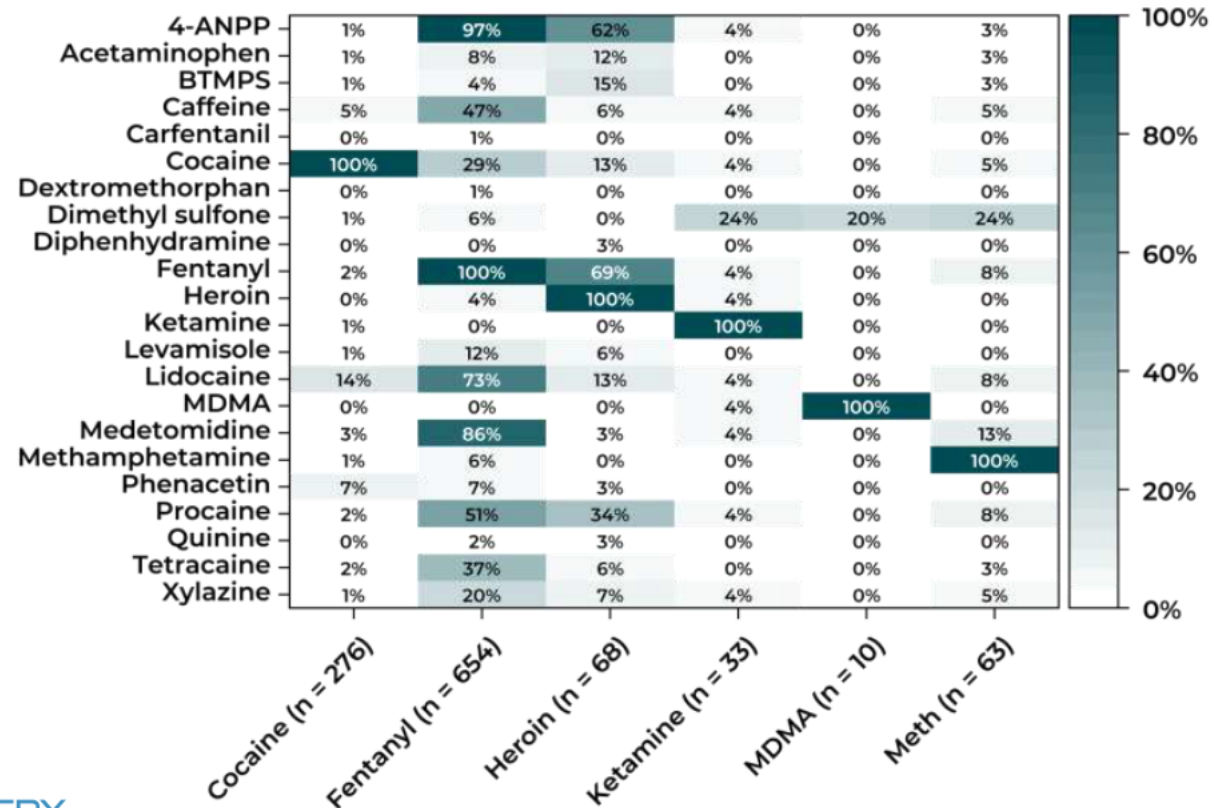


For the Mid-Atlantic region, they are seeing more medetomidine and local anesthetics but decreasing amounts of carfentanil.

For the Midwest Region, they are seeing diphenhydramine and frequent detection of nitazene and orphine analogs.

MIDATLANTIC COOCCURRENCE (Q4 '25 – Q1 '26)

- Other noteworthy combinations:
- Fentanyl
 - Benzocaine 5.3%
- Much clearer distinction between heroin and fentanyl samples
- Similarly low rates of adulteration of cocaine and methamphetamine



This heat map for the Mid-Atlantic region demonstrates noteworthy drug combinations at the end of 2025 and start of 2026. For example, fentanyl is frequently seen with 4-ANPP, medetomidine and lidocaine and is also being seen, just less frequently, mixed with procaine and caffeine.

*****Insights from Henrico County Police Department (HPD)*****

HPD has seen an increase in methamphetamine (crystal and counterfeit ecstasy MDMA pills that are testing positive for methamphetamine; aka they're pressed methamphetamine powder).

QUESTIONS?

**Link to register for future
ORS TAT Webinars:
[ORS TAT Webinar Series Registration Link](#)**

APPENDIX



May2026_ORSTAT
_Slides



May2026_ORSTAT
_Summary