



EMPOWER HENRICO

Preventing, Treating and
Combating Substance Use

**September 2025 Overdose Response Strategy (ORS)
Trends, Analysis & Threats Webinar Summary**

**Empower Task Force Meeting
September 18, 2025**

ABOUT THE OVERDOSE RESPONSE STRATEGY*

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.*

Presenters in September webinar included:

- **Joshua DeBord, PhD, Senior Scientist**

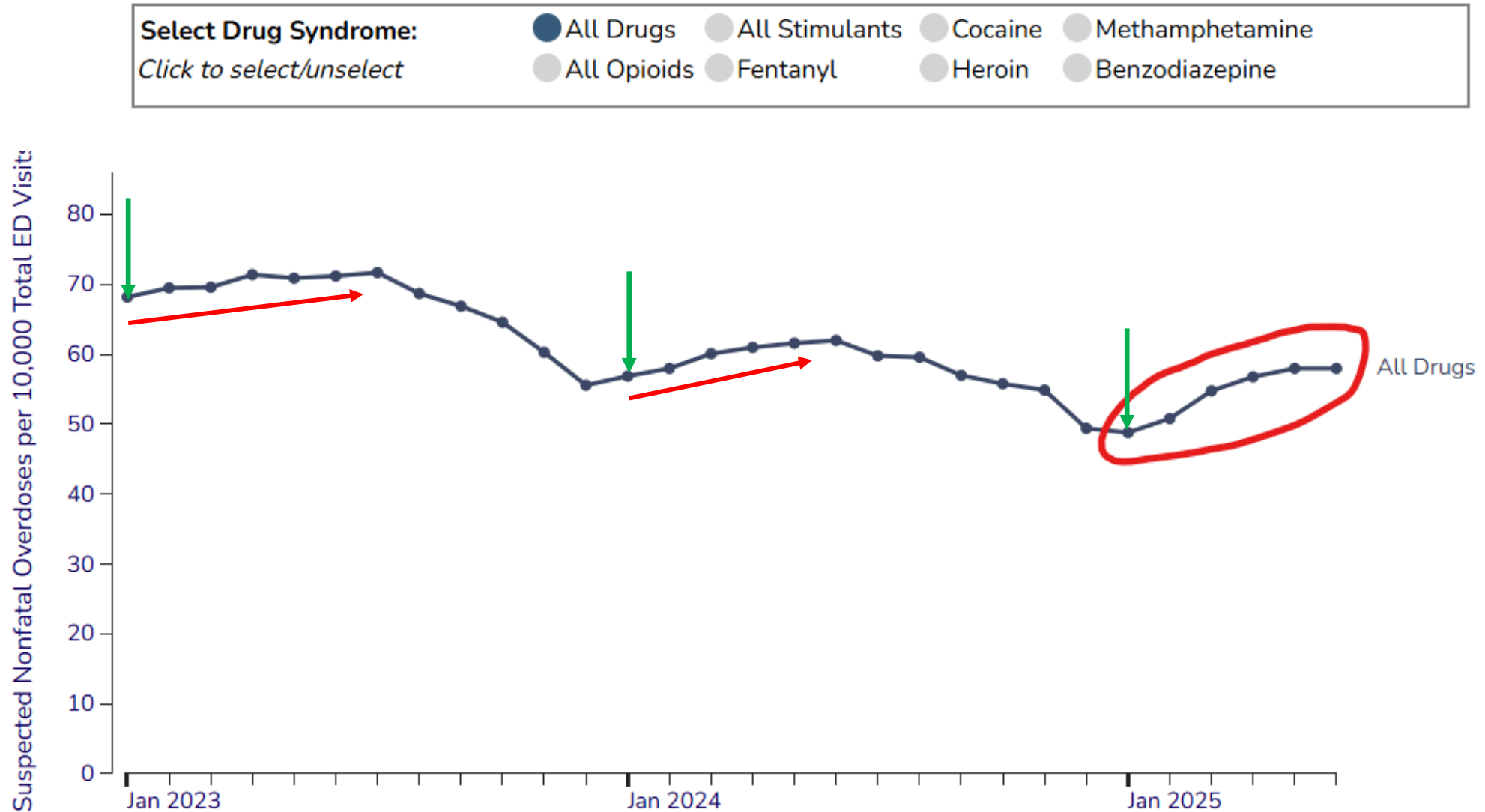
The Center for Forensic Science Research and Education (CFSRE)

- **Joseph J Palamar, MPH, PhD, Deputy Director**

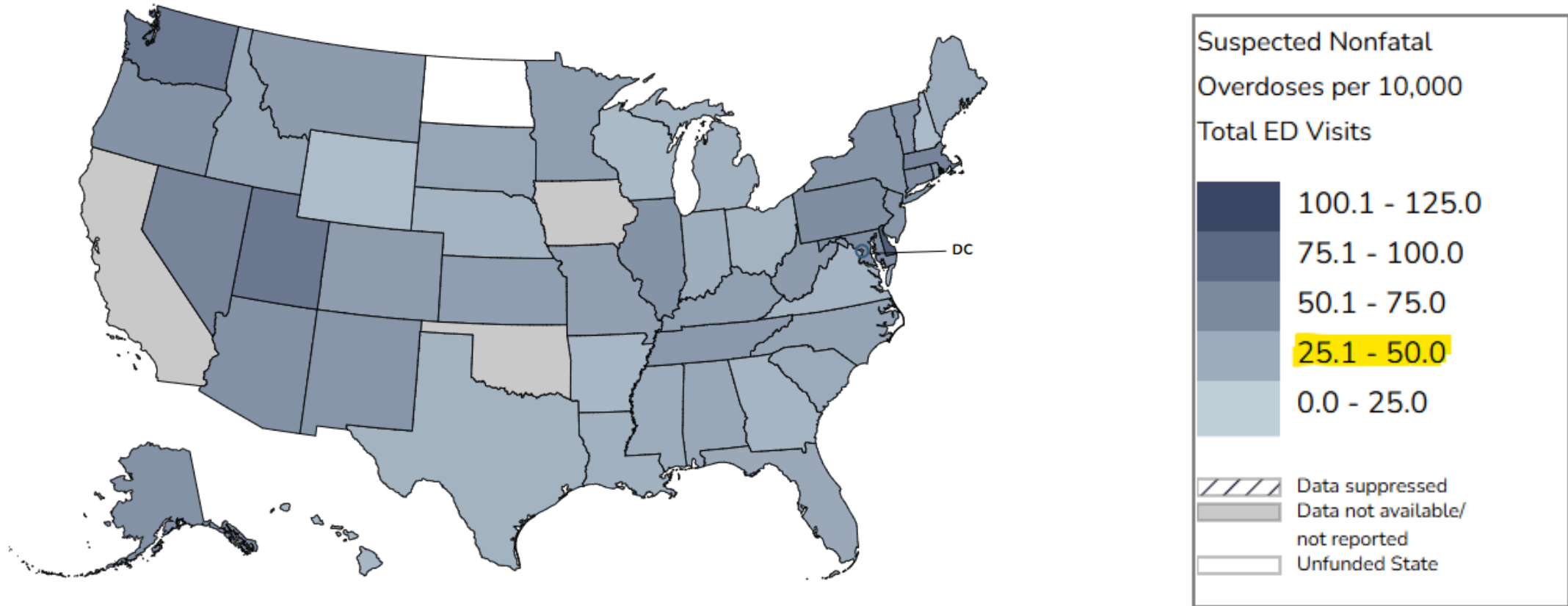
National Drug Early Warning System (NDEWS)

Items of Interest

ED visits for all-drug suspected non-fatal overdoses have been **increasing in the first six months of 2025, but....**



Items of Interest, cont.



Scale of the figure may change based on the data selected.

That increase isn't being impacted as much by Virginia ED visits, where suspected all-drug non-fatal overdose ED visits for Jan-Jun 2025 are at a rate of ~44.5 for every 10,000 total ED visits.

Items of Interest, cont.

Novel Mixtures Shifting the Illicit Drug Landscape

- The “fourth wave” of the opioid crisis – fentanyl + stimulants
- Now various “legal” drugs used as adulterants
 - Xylazine
 - Medetomidine
 - Local anesthetics (“-caines”)
 - BTMPS
 - Ketamine (controlled, not legal)

VDH info about Medetomidine locally:

- In 2023, the number of items was 33, originating from the Central, Eastern and Northern regions, in powder and solid forms, with one seen in a capsule. 85% of those seen with xylazine.
- In 2024, the number of samples increased up to 62, with submissions from all regions and was seen in powder and solid forms, 69% contained xylazine.
- From January - July 2025, the number of Items again increased to 256, with submissions coming from all regions. In addition to powder and solid forms, we also saw it in tablets. 48% that also contained Xylazine. Also seen combined with: Fentanyl, Cocaine, para-fluorofentanyl, Heroin, Methamphetamine, Bromazolam, Promethazine, Tramadol, and one instance with Morphine.

Items of Interest, cont.

“-Caines”

Primary “-Caines” Detected

- Lidocaine
- Benzocaine
- Bupivacaine
- Procaine (Novocain)
- Tetracaine

Information Sources:

- Sentinel network
- Community Experts
- Health departments (NYC)
- CFSRE / NPS Discovery
- DEA NFLIS

“-Caines”

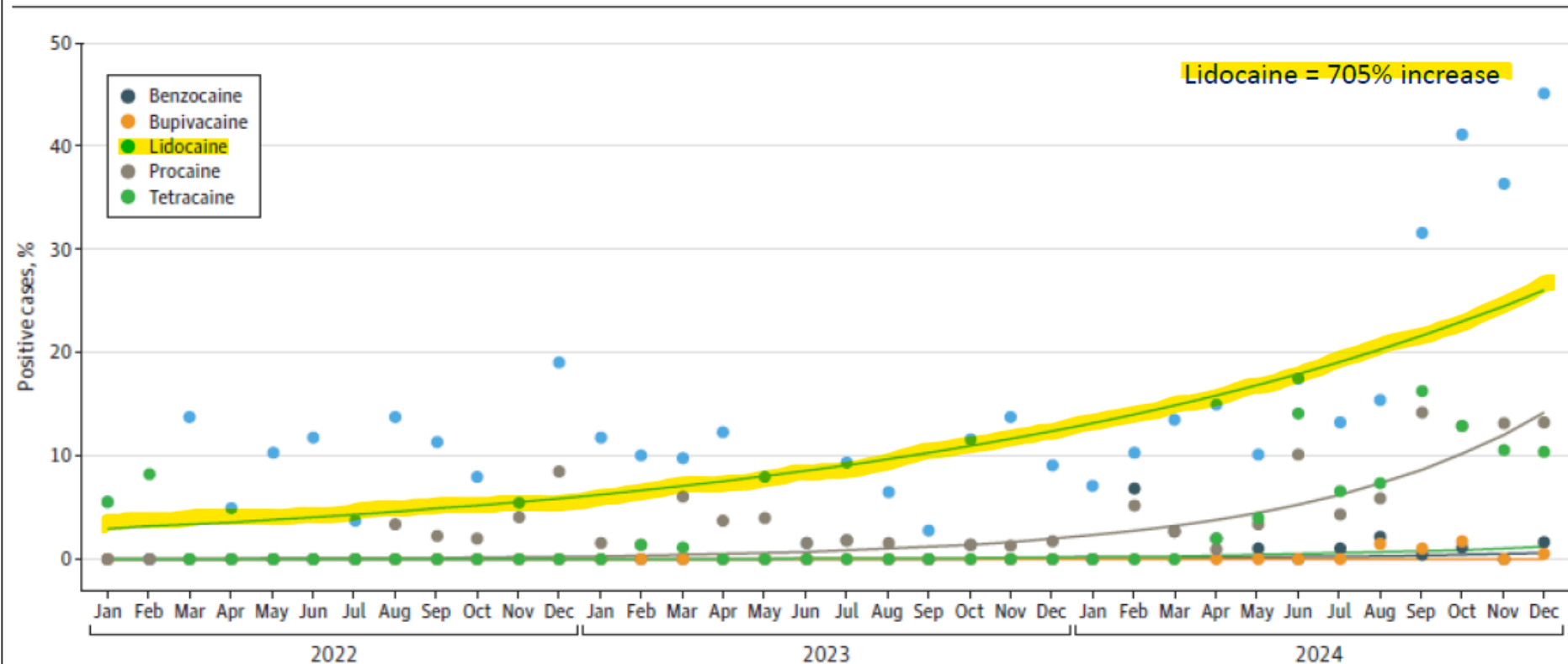
- Detected in fentanyl (CFSRE), usually without co-detection of cocaine
- In 2024, 29.9% of fentanyl cases (500 of 1675) co-involved at least one local anesthetic
- In December 2024, 29.3% of fentanyl cases (22 of 75) co-involved multiple local anesthetics
- Medical staff have reported to us that fentanyl overdoses involving “-caines” have atypical presentations including:

- Agitation or fear
- Racing heartbeat
- Gray or blue skin
- Numbness of the limbs
- Slowed breathing
- Rapid loss of consciousness
- Tingling in the extremities
- Hallucinations
- A minimal or short-acting respiratory response to naloxone

Items of Interest, cont.

Trends in “-Caine” Detection in Fentanyl

Figure. Monthly Trends in Local Anesthetic Positivity in Illicitly Manufactured Fentanyl Samples in the US



	January 2022	December 2024	Highest % Month/Year
Lidocaine	5.6%	45.1%	December 2024 (45.1%)
Procaine	0.0%	13.3%	September 2024 (14.2%)
Tetracaine	5.6%	10.4%	September 2024 (16.3%)
Benzocaine	0.0%	1.7%	February 2024 (6.9%)
Bupivacaine	0.0%	0.6%	August 2024 (1.8%)

Items of Interest, cont.

7-OH (7-hydroxymitragynine)

- Tiny amounts of 7-OH are present in kratom (~1-2% of the weight)
- Now being synthesized and sold in stores
- Acts like an opioid, and more potent than morphine
- Withdrawal, addiction, overdose risk
- Sold as pretty tablets that look like candy, gummies, or energy drinks
- The FDA issued an alert last month

US FDA. 7-Hydroxymitragynine (7-OH): An Assessment of the Scientific Data and Toxicological Concerns Around an Emerging Opioid Threat. Bendix A. FDA asks Justice Department to classify gas station products with opioid-like effects as illicit substances. NBC News. July 29, 2025.



Items of Interest, cont.

Reddit Scraping

Goals

- Quantify drug discussion
- Detect drug trends and temporal associations
 - Emergent NPS
 - Known drug usage trends
 - New abbreviations/slang



Reddit logo created by umberto_pagano (r/Art).

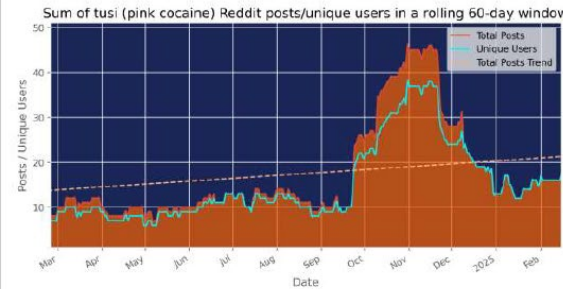
PINK COCAINE/TUSI:

Online discussions center on its inconsistent effects and ingredients. Reddit users report it's usually a highly variable mixture of various substances including MDMA, ketamine, caffeine, 'bath salts', fentanyl and/or other opioids. Frequently mentioned as a recreational substance especially in rave settings.

7-OH:

Online discussions report that 7-OH provides subjective effects similar to prescription opioids. Some Reddit users report developing a 'dependence' within just 2 weeks of use along with severe and long-lasting withdrawal symptoms. Users reported that single doses can be highly potent. Some report they purchased 7-OH for chronic pain management.

Reddit Monitoring: Tusi ("pink cocaine")



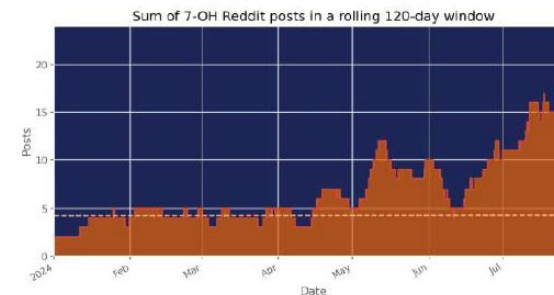
How is it being discussed? Online discussions about Tusi often center on its inconsistent effects and ingredients. Reddit users report that Tusi is a highly variable mixture of various substances, including MDMA, ketamine, caffeine, "bath salts", fentanyl, and/or other opioids. There is frequent mention of its popularity as a recreational substance, particularly in rave settings. Discussants often warn about the unpredictability of its effects due to variability in what drugs the mixture contains. The risk of inclusion of highly potent and dangerous substances like fentanyl in some Tusi mixtures is a



Reddit Monitoring: 7-OH



Alert from the NDEWS Web Monitoring Team: Reddit online mentions of 7-OH



How is it being discussed? Reddit users report that 7-OH provides subjective effects similar to prescription opioids. Some Reddit users report developing a "dependence" within just two weeks of use, as well as severe and long-lasting withdrawal symptoms. Users report that single doses can be highly potent. There are also concerns about the safety and purity of 7-OH tablets, as they may be cut with other substances. Many discussants report that they purchased 7-OH for chronic pain management. Since the last web monitoring update, Reddit users have reported increased availability, both in terms of in-person shops and shipping, along with a large price increase. There has also been increased discussion about the ingestion of 7-OH in liquid as opposed to tablet form.

Discussed in new FDA report:

7-Hydroxymitragynine (7-OH):
An Assessment of the Scientific Data and
Toxicological Concerns Around
an Emerging Opioid Threat