# CT's Drug Dynamics: Analyzing Current Trends, Emerging Threats, and the Complexities of Poly-Substances

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# What is the Overdose Response Strategy (ORS)?

The Overdose Response Strategy 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.



Visit us at ORSprogram.org!

### **ORS Mission Statement**

The mission of the Overdose Response Strategy 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.





#### The ORS allows us to...

**COLLABORATE** across public health and public safety sectors



By creating opportunities to...

**SHARE** data, insights and trends we are seeing related to drug overdose in our communities

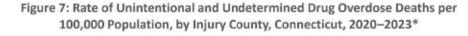


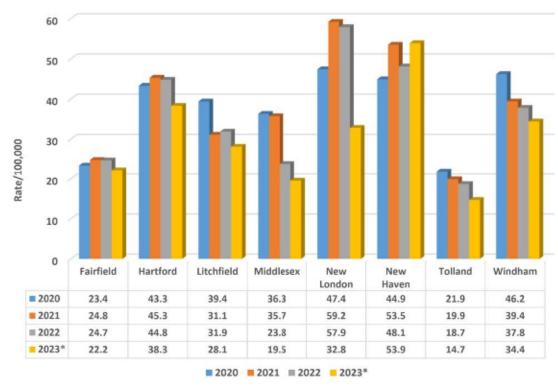
We use that information to...

INFORM AND HELP local communities develop local solutions to reduce overdoses and save lives

#### **CT Overdose Trends**

- As of November 2023, there are 1,147 confirmed FATAL overdoses, where 84.7% of those involved Fentanyl
- CT-DPH is modeling for a final fatal overdose number of 1,398, which would be a 4.5% decrease from 2022.
- 74.2% of fatal overdoses occur in a residence.
- The mortality rate is highest among non-Hispanic black males, ranged from 45-54 years old.





Source: CT Department of Public Health (CT-DPH), 2023

#### Connecticut's Top Drug Issues

Fentanyl

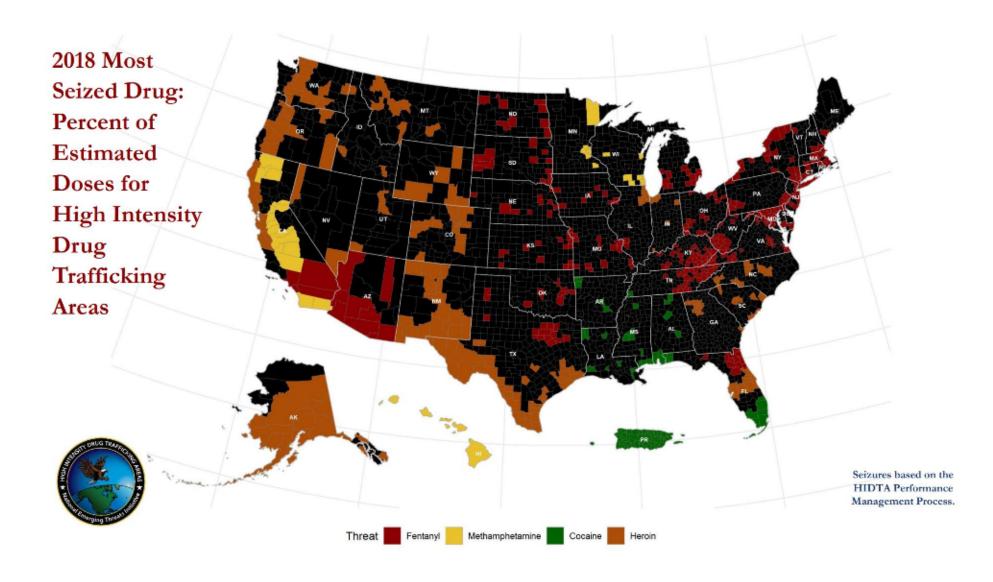
Cocaine/Crack

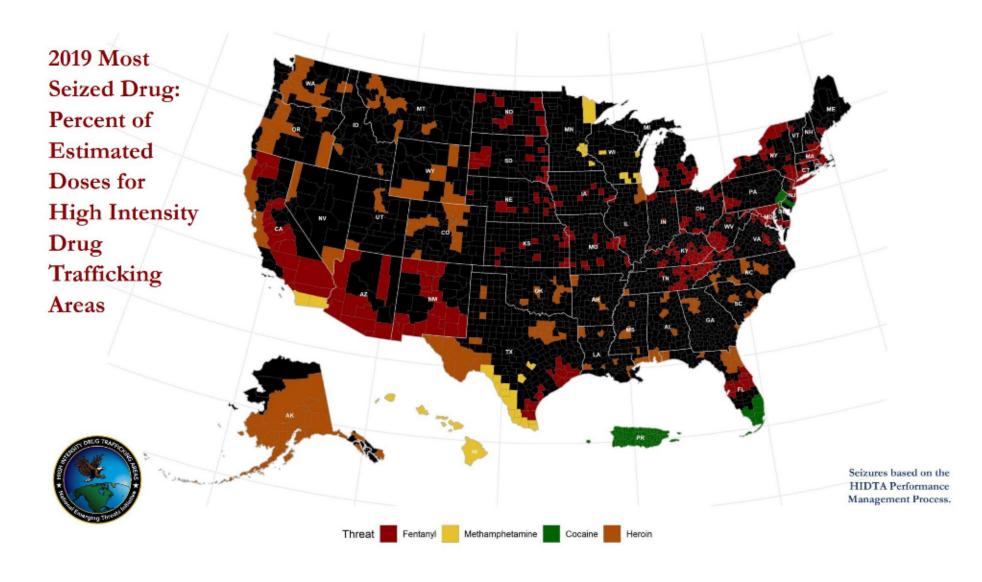
Fake Pills

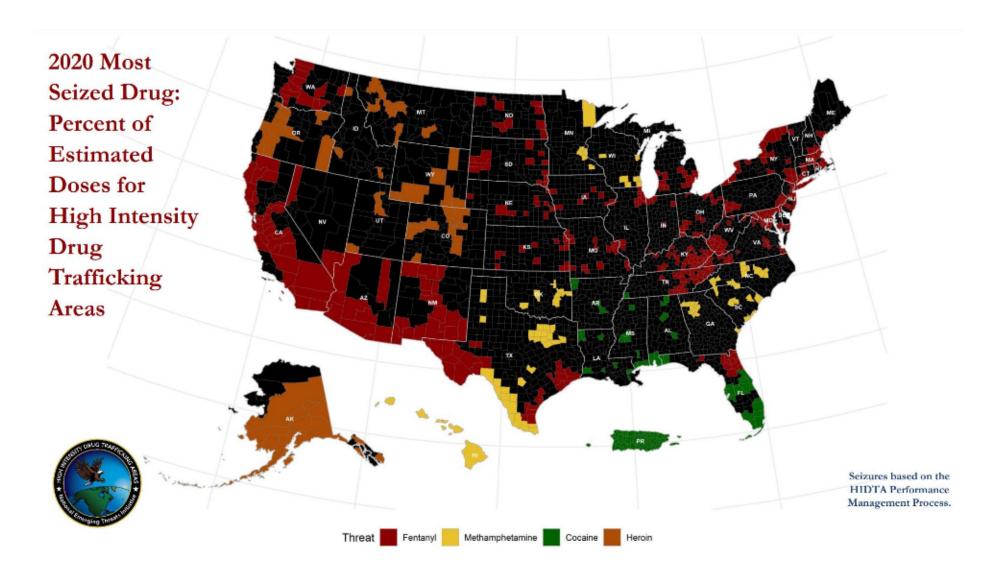
Methamphetamine

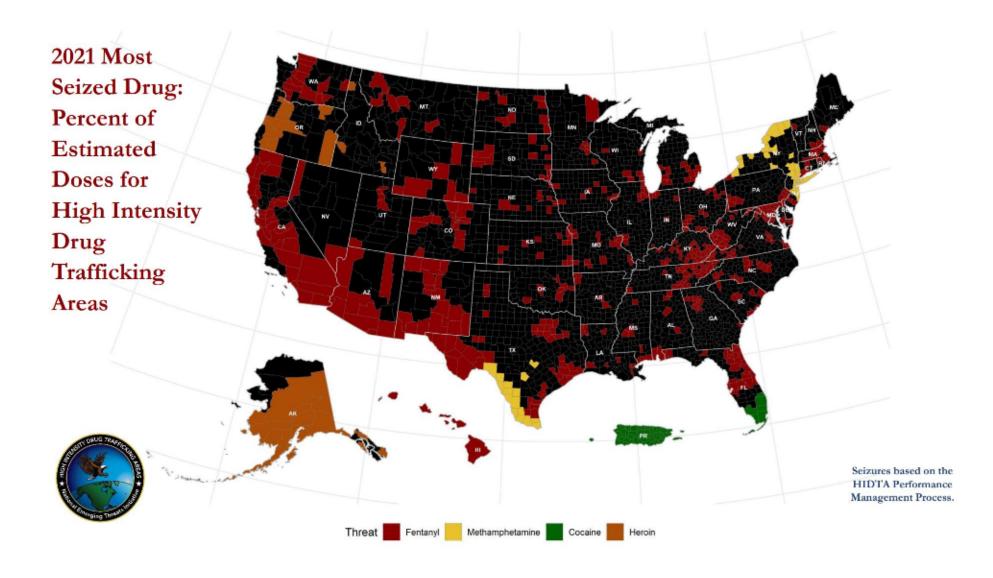
Synthetic Cannabinoids

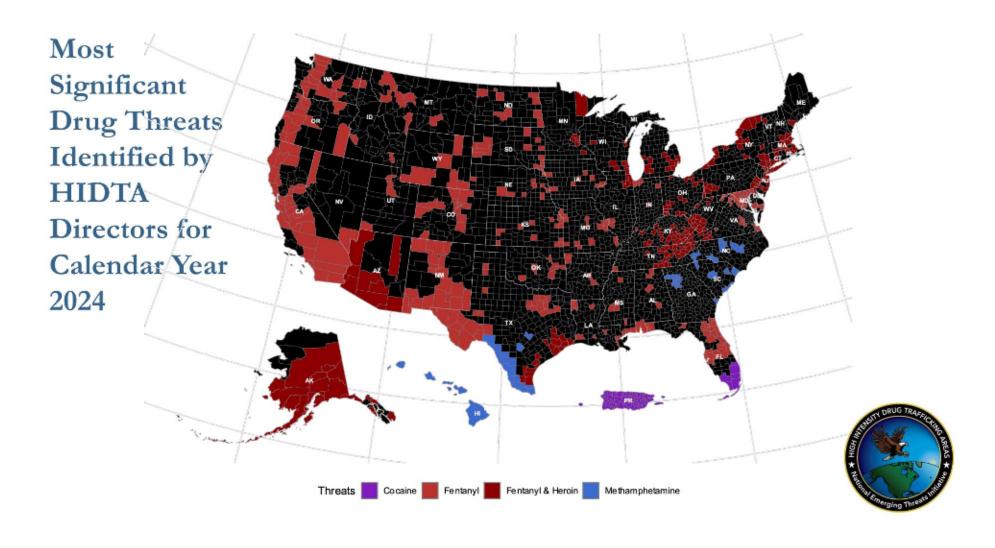
Source: CT ORS/NEHIDTA, 2024

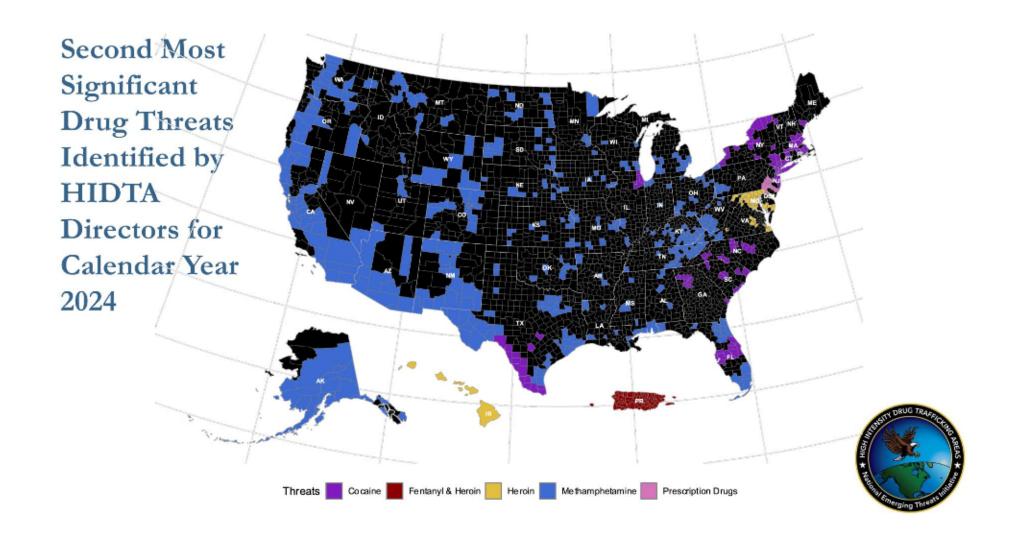


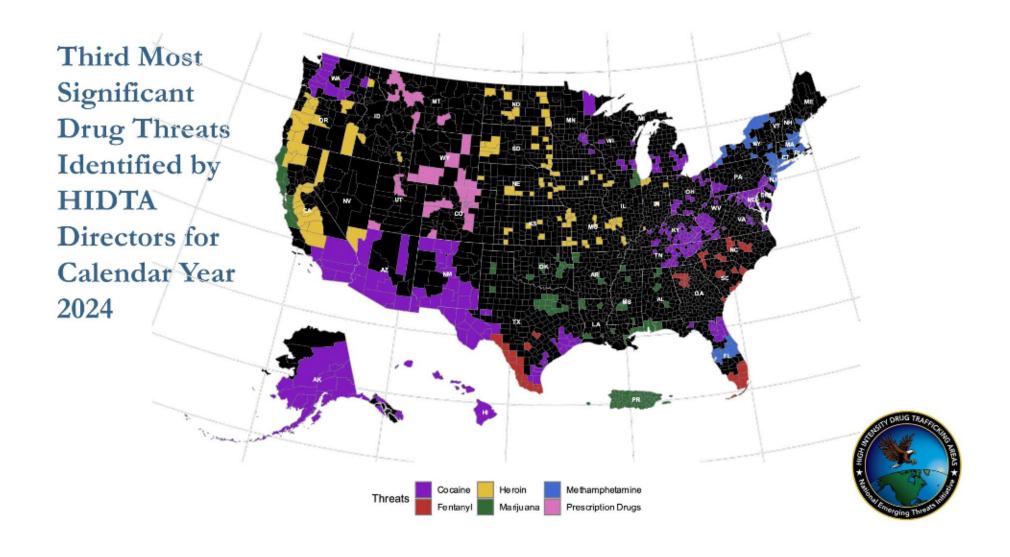










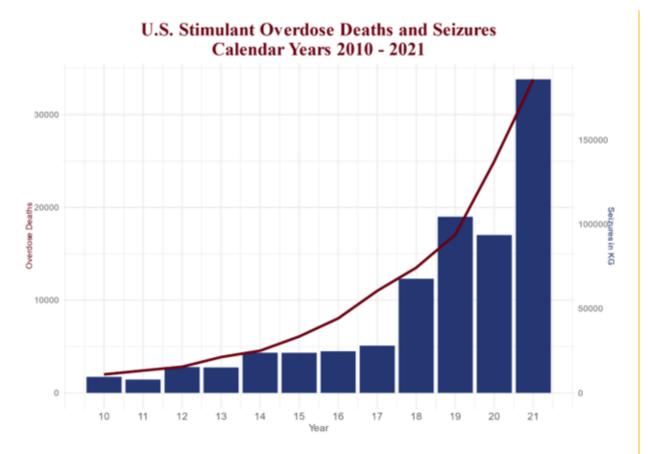


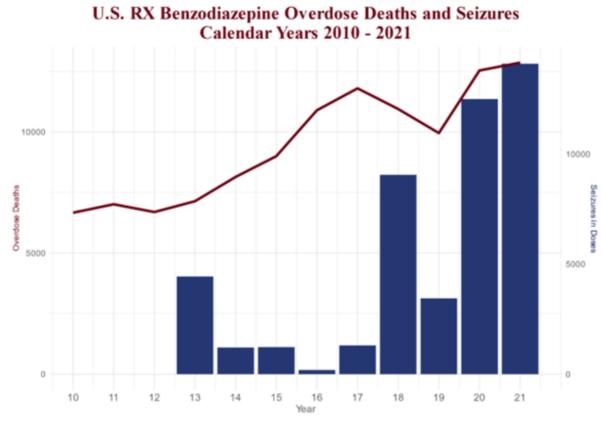
Polysubstance Use

**VS** 

Polysubstances

#### Correlation of Rise of Overdose Deaths and Law **Enforcement Seizures**





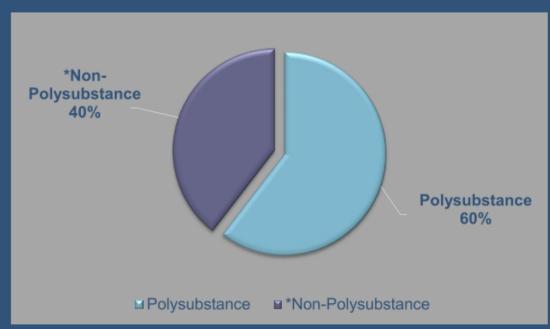
Source: Hamby, Eadie, & Hall, 2022

## CT Forensic Lab Results 2023

The most common polysubstance mixture combination is Fentanyl and Heroin

Poly-substances found in law enforcement seizures results:

- 99.4% of items containing polysubstance mixtures consisted of at least (2) opioids.
- 7.8% of items containing polysubstance mixtures consisted of at least (1) opioid and (1) stimulant.



\*This includes residues, THC edible and/or sublingual films

Source: CT-DESPP DSS, 2024

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#### Law Enforcement Seizure Lab Results

Fentanyl, Heroin, Tramadol, Chlorfentanyl, Xylazine, caffeine, sugar and procaine Fentanyl, Heroin, Cocaine, Tramadol, Chlorofentanyl, Xylazine, caffeine, lidocaine and procaine Fentanyl, Heroin, Tramadol, Chlorfentanyl, caffeine, sugar, lidocaine, quinine and procaine

Fentanyl, Heroin, Tramadol and quinine

Cocaine, Methamphetamine and acetaminophen

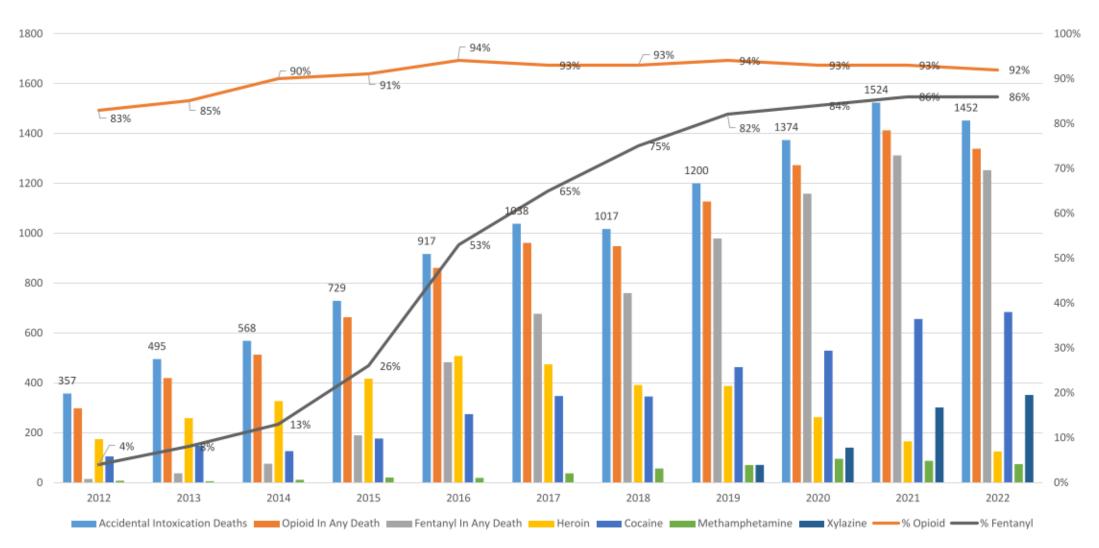
Methamphetamine, Eutylone and procaine Methamphetamine, Eutylone and procaine Fentanyl, Parafluorofentanyl, Tramadol and inositol

Fentanyl, Bupropion and caffeine

Fentanyl, Parafluorofentanyl, Tramadol and mannitol

Source: CT-DESPP DSS, 2023

#### **Connecticut Fatal Overdoses 2012-2022**



Source: CT Open data: CT Office of the Chief Medical Examiner., 2023

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# Fatal Overdoses due to Complications from Poly-Drug Use

Fentanyl, Xylazine, Fluoxetine, Amitriptyline, Tramadol and Gabapentin Cocaine, Fentanyl,
Methadone,
Hydroxyzine, Duloxetine,
Gabapentin, Quetiapine,
and Despropionyl
Fentanyl (4-ANPP)

Fentanyl, Xylazine, Cocaine, Clonazepam and Diphenhydramine

Ethanol, Cocaine, Fentanyl and Morphine

Fentanyl, Cocaine and Xylazine

Fentanyl, Promethazine, Mitragynine and Lamotrigine Fentanyl, Parafluorofentanyl, Despropiony Fentanyl (4-ANPP) and Xylazine

Source: CT-OCME, 2023 and CT-DPH, 2023

## **ON THE RADAR**

#### **METHAMPHETAMINE**

- Commonly referred to as METH, ICE, Tina, and Crystal
- · Powerful Psychostimulant
- Affect three key neurotransmitters
- · Dopamine Receptor
- Serotonin Receptor
- · Norepinephrine Receptor
- · Can cause the following behavioral issues:
- · Hyperactivity, Erratic sleep, twitching
- · Symptoms of Use
- Rooting Teeth, Dilated Pupils
- Meth has been in CT for awhile, mainly regulated to the M4M party scene, has recently become more available, MDMA/Ecstasy & Adderall pills are pressed meth pills

#### **NITAZENES**

- · Referred to as Benzimdazole
- · A powerful synthetic opioid
- Highly active at the mu-opioid receptor with a potency and efficacy exceeding fentanyl
- At equal doses Nitazenes cause more profound and longer lasting respiratory rate of depression than fentanyl
- Should respond to naloxone but because of its strong affinity at the receptor may take multiple doses to knock off receptor
- Nitzanes have been identified in a small amount of Fatal Toxicology' & Law Enforcement Seizures

#### DESIGNER BENZODIAZEPINES

- A very commonly prescribed drug for anxiety and other issues
- Benzos are in a class of drugs that bind to the GABA receptors
- May bind to receptors in the CNS system causing depression of the respiratory system
- Numerous studies have indicated the dangers of mixing opioids and benzos.
   Benzos do not respond to naloxone.
- Designer Benzos have been discovered in CT and we have seen Designer Benzos with opioids in tested samples

(Palkovic, 2022)(Roberts, 2022)(CT-OCME 2023)(CT-DESPP DSS, 2023) (Vozoris, 2014)(ACS, 2018)(Keen, 2000)(Lader, 2011)(CT-OCME 2023)(CT-DESPP DSS, 2023)

(Richards & Laurin, 2023)(CT-OCME)(CT-DESPP DSS, 2023)



### Methamphetamine



Increased Violence and Crime: Meth usage is associated with heightened aggression and erratic behavior which often manifests into violent acts and criminal behavior.

**Resource Strain**: Increased meth use in the community will strain public safety resources due to increase overdoses and crime



Surge in Addiction & Overdoses: Meth is a highly addictive substance and increase use in the community will lead to increased addiction and overdoses. This puts a strain on EMS, hospitals and treatment facilities.

Mental & Physical Decline: Meth usage, especially prolonged use, can lead to psychosis, depression and anxiety, along with severe dental issues and cardiovascular problems.

(NIDA, 2023)(Conner et al 2019)(McKetin et al 2019)(Beaman et al 2023)(NIDA, 2021, Sept 22)(NIDA, 2021)(NIDA, 2021, Jan 20)(NIH, 2021)

#### **Nitazenes**



**Impact on Public Safety and Community Relations**: The presence of a new high potency drug can lead to heightened public safety concerns due to a rise in addiction and crimes committed to support those with a substance use disorder.

**Challenges in Narcotic Investigations**: A new synthetic opioid, could mean that there has been a dynamic change in the way drugs are trafficked into CT and more importantly by who causing Law Enforcement change their approach and employ different techniques to disrupt drug trafficking.



**Strain on Emergency Medical Services and Healthcare Facilities:** The high potency of Nitazenes significantly increases the risk of overdose and could also lead an increase in fatal overdose, this would put a significant strain on resources.

**Challenges in Addiction Treatment:** Nitazenes, because of its potency poses significant issues in treating those addicted to Nitazenes. This might include the need to develop new treatment modalities and strategies to handle Nitazenes addiction.

(HMP Global Learning Network, n.d.)(Haven Health, n.d.)(LaPedis, 2023, March 7)(Drug Intelligence Bulletin, 2023)

### Designer Benzodiazepines



Difficulty in Detection and Identification: Designer benzodiazepines, being chemically altered from their original form, can be challenging to detect and identify using standard drug testing methods. This would create difficulties for law enforcement in both field-testing during stops and seizures and in forensic analysis for prosecution purposes. Increased Public Safety Concerns: Increase in the illicit drugs could lead to an increase in drug-related emergencies, such as overdoses and accidents due to impaired judgment or coordination. Law enforcement officers would likely encounter more situations requiring medical intervention.



Increased Incidences of Overdose and Poisoning: The rise in use of designer benzodiazepines, which may be more potent than their prescription counterparts, could lead to an increase in overdoses, which would put a significant strain on emergency medical response resources.

Challenges in Addiction Treatment and Prevention Programs: Designer benzodiazepines, being illicit and potentially having varying compositions, pose a significant challenge to existing addiction treatment and prevention programs. Health professionals might need to adapt their treatment strategies to address the specific effects and withdrawal symptoms associated with these substances.

(Brunetti et al 2021)(Concordia, 2016, June 1)(LaPedis, 2023 March 7)(Reeves et al 2022)



**Desensitization to Drug Prevention Messages:** Many adolescents and youth have been exposed to a variety of drug prevention messaging and education from a young age (like the TRUTH campaign, D.A.R.E. program, One Pill Can Kill campaign), which can lead to desensitization. They might perceive these messages as repetitive or irrelevant, making it challenging to engage them effectively.

**Misinformation and Glamorization on Social Media:** Social media can spread misinformation about drug use, sometimes even glamorizing it. Young people are heavily influenced by online content, which causes favorable attitudes and countering these pervasive and often subtle messages can be challenging.

**Access and Availability:** The ease of obtaining drugs can undermine prevention efforts. When these drugs are readily available in a community, the risk of youth experimentation and regular use increases, despite awareness of the potential dangers.

(BMC Public Health)(Hashemi et al, 2024)(Klobucista, 2021)(U.S. Dept of State)(HHS, 2022)

# Recommended Strategies



## **Prevention**

- School-based prevention programs and curriculums
- Public awareness campaigns
- Provider education
  - How to identify early signs of mental health, trauma and addiction and referral to treatment
- Parenting programs
- Community coalitions

#### **Overdose Prevention**

- Naloxone distribution
- Overdose education programs
- Harm reduction programs
- Increase education on the 'Good Samaritan' law
- Post-overdose outreach programs
- Increase access to Medications for Opioid Use disorder (MOUD)

# **Treatment**

- Upgrade or expand:
  - Substance use treatment centers
  - Counseling and therapy services (youth and adult)
  - Medication for Opioid Use Disorder (MOUD)
  - Telemedicine services
- Promotion and education of the effectiveness of MOUD
- Wide-spread adoption of MOUD in carceral settings
- Peer to peer linkage to care and supports
- Family support and therapy programs

# Recovery

- Recovery homes
- Recovery community centers
- Case management services
- Peer recovery support programs
- Job training and education
- Telehealth services
- Family support and therapy programs
- Wellness programs

#### Thank you!



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- The Connecticut Overdose Response Strategy
- The New England High Intensity Drug Trafficking Areas

Source Disclaimer: National Emerging Threats Initiative (NETI), 2023, The following maps have been prepared from annual drug threat ratings by High Intensity Drug Trafficking Area (HIDTA) Directors, experienced law enforcement professionals who oversee illicit drug seizure efforts throughout the United States. These graphs are one of several sources of information used by the national HIDTA program to assess emerging drug threats. This report has been published and can be found on the web at: <a href="https://www.hidtaprogrm.org/NETI">www.hidtaprogrm.org/NETI</a>