cfsre | NPS DISCOVERY

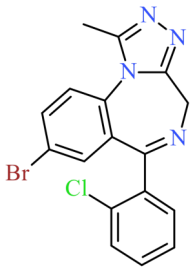
PUBLIC ALERT

DEC 2025

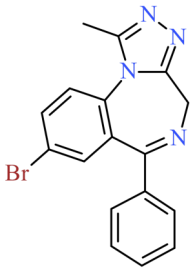
NOVEL BENZODIAZEPINE PHENAZOLAM INCREASING IN DETECTIONS AND PREVALENCE AMONG U.S. RECREATIONAL DRUG MARKETS

PURPOSE: The objective of this announcement is to notify public health and safety, law enforcement, first responders, clinicians, medical examiners and coroners, forensic and clinical laboratory personnel, and all other related communities about new information surrounding the emergent novel benzodiazepine **Phenazolam** (also referred to as "clobromazolam" among online markets and drug forums).

BACKGROUND: NPS benzodiazepines, often referred to as "novel" or "designer" benzodiazepines, are chemically manufactured substances, modified based on the diazepine core structure central to diazepam, alprazolam, and many other traditional benzodiazepines. These novel drugs are not well studied in humans, especially not in recreational settings, and as such the literature lacks established health risks or toxicity. NPS benzodiazepines pose health and safety concerns due to their CNS depressant effects, paired with increased potency causing adverse effects at low doses. Adverse effects include strong sedation, amnesia, loss of coordination, drowsiness, dizziness, blurred vision, slurred speech, and muscle relaxation. NPS benzodiazepines are of particular interest to the forensic community for their use in drug facilitated crimes, impaired driving circumstances, and fatal overdoses where they appear as adulterants alongside opioids (i.e., "benzo-dope" drug products that may be sold as powders and tablets).



PHENAZOLAM

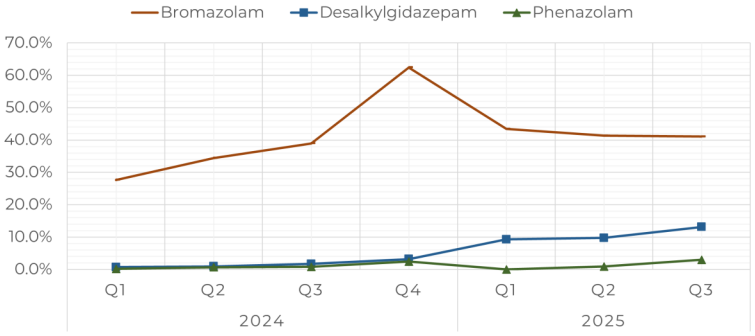


BROMAZOLAM

SUMMARY: Phenazolam was first synthesized in the 1980s as a potential pharmaceutical but was not approved for therapeutic use. Phenazolam currently is not explicitly scheduled or controlled in the United States. Phenazolam is structurally similar to bromazolam, the previous and current most commonly detected NPS benzodiazepine, differing by the addition of a chlorine atom on the benzene ring (hence its nickname "clobromazolam"). Phenazolam was first detected in 2016 in a seized drug product in Sweden. The first detection of this drug at the **Center for Forensic Science Research and Education (CFSRE)** was made in 2022 in a blood specimen tested in collaboration with **NMS Labs**. The positivity of phenazolam had steadily increased overall since 2024, with an observed upward trend in phenazolam positivity from Q1 to Q3 2025. In March 2024, the World Health Organization placed bromazolam under Schedule IV of the Convention on Psychotropic Substances of 1971. Similar to control actions for other NPS, the positivity of bromazolam is expected to decline as it is replaced among the illicit drug supply with other novel benzodiazepines like phenazolam.

In 2025, phenazolam has been identified in eleven blood specimens (antemortem and postmortem) and 33 drug materials that were tested at our laboratory. The blood specimens originated from across the United States, as well as the United Kingdom. The majority of postmortem cases were males with ages from 18 to 31 years. Phenazolam has been detected alone and alongside other drugs including other benzodiazepines, opioids, stimulants, and hallucinogens. NPS detected alongside phenazolam included nitazene analogues, orphine analogues, medetomidine, and bromazolam, among others.

PHENAZOLAM POSITIVITY FROM Q1 2022 TO Q3 2025



Note: *This graphic illustrates percent positivity in a toxicology sample population analyzed consistently since 2018 with high NPS occurrence.*

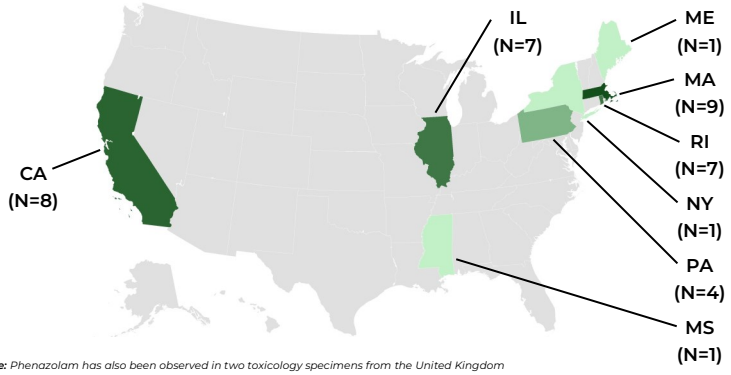
DRUG MATERIALS CONTAINING PHENAZOLAM

SAMPLE	STATE	QUALITATIVE RESULTS
Powder	RI	Fentanyl, *N*-Desethyl Protonitazene, *ortho*-Methylfentanyl, **Phenazolam**, Ketamine, Cocaine, Medetomidine, Xylazine, Lidocaine, Procaine, Tetracaine, BTMPS
Powder	IL	Fentanyl, Heroin, **Phenazolam**, Cocaine, Medetomidine, Diphenhydramine, Lidocaine, Quinine, BTMPS
Powder	MA	Fentanyl, Heroin, *N*-Desethyl Protonitazene, *para*-Fluorofentanyl, Spirochlorphine, **Phenazolam**, Cocaine, Medetomidine, Lidocaine, Quinine, Xylazine
Tablet	IL	**Phenazolam**, Cocaine, Lidocaine
Powder	IL	Fentanyl, *N*-Desethyl Protonitazene, Spirochlorphine, **Phenazolam**, Cocaine, Medetomidine, Lidocaine, Xylazine, BTMPS
Tablet	PA	**Phenazolam**

TOXICOLOGY SPECIMENS CONTAINING PHENAZOLAM

SAMPLE	CASE TYPE	RESULTS
Antemortem Blood	Hospital	Bromazolam (5.9 ng/mL), **Phenazolam**, Methamphetamine, Clonidine, Desmethyldoxepin, Doxepin, 7-Amino Clonazepam, Hydroxyzine, Haloperidol, Tamsulosin, Buprenorphine, Caffeine
Blood	Impaired Driving	4'Cl-Deschloroalprazolam (57 ng/mL), Alprazolam (12 ng/mL), **Phenazolam**
Femoral Blood	Postmortem	*N*-Pyrrolidino Isotonitazene (3.1 ng/mL), **Phenazolam**
Blood	Impaired Driving	**Phenazolam**
Blood	Postmortem	Mitragynine (4.8 ng/mL), 7-Hydroxy Mitragynine (83 ng/mL), Mitragynine Pseudoindoxyl (58 ng/mL), **Phenazolam**
Blood	Postmortem	**Phenazolam**, Cocaine, Benzoylecgonine, Norcocaine, Caffeine
Blood	Postmortem	**Phenazolam**, *N*-Propionitrile Chlorphine

STATES WITH POSITIVE PHENAZOLAM SAMPLES



Note: *Phenazolam has also been observed in two toxicology specimens from the United Kingdom*

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