NYC Drug Checking Report:
October 1, 2025, to December 31, 2025 (Quarter 4 2025)

Background

In collaboration with community partners, the NYC Health Department offers drug checking services at six syringe service programs across NYC. Trained drug checking technicians use immunoassay test strips and Fourier transform infrared (FTIR) spectrometry to analyze and determine the contents of drug samples, then provide tailored harm reduction education and information based on the compounds present in the samples. Currently, nearly all samples are sent for secondary laboratory testing, which uses advanced techniques to further analyze the compounds. In rare cases, samples may be excluded from testing if the technician determines that the material is not a drug after analysis or at the request of the participant accessing the service. This report only includes secondary laboratory testing results and aims to provide insights into broader drug trends and opportunities for community response and tailored harm reduction strategies.

Disclaimer

This report presents findings from drug checking data collected across NYC. This information is intended for public health monitoring and harm reduction efforts and should not be interpreted as a representation of all substances circulating in NYC's unregulated drug supply. Samples submitted for drug checking may contain more than one substance. This report does not include information about the amounts of various components found within drug samples that contain multiple substances and does not differentiate between major and trace-level components in drug samples that contain multiple substances. Inactive compounds (compounds that do not produce a pharmacological effect) are routinely found in NYC's unregulated drug supply but are not included in this report. Unexpected combinations of substances in a single sample may be due to intentional or unintentional contamination during the production, consumption, or checking phases. Data included in this report reflect information available at the date of publication and are subject to change. A glossary of terms is available at the end of this report.

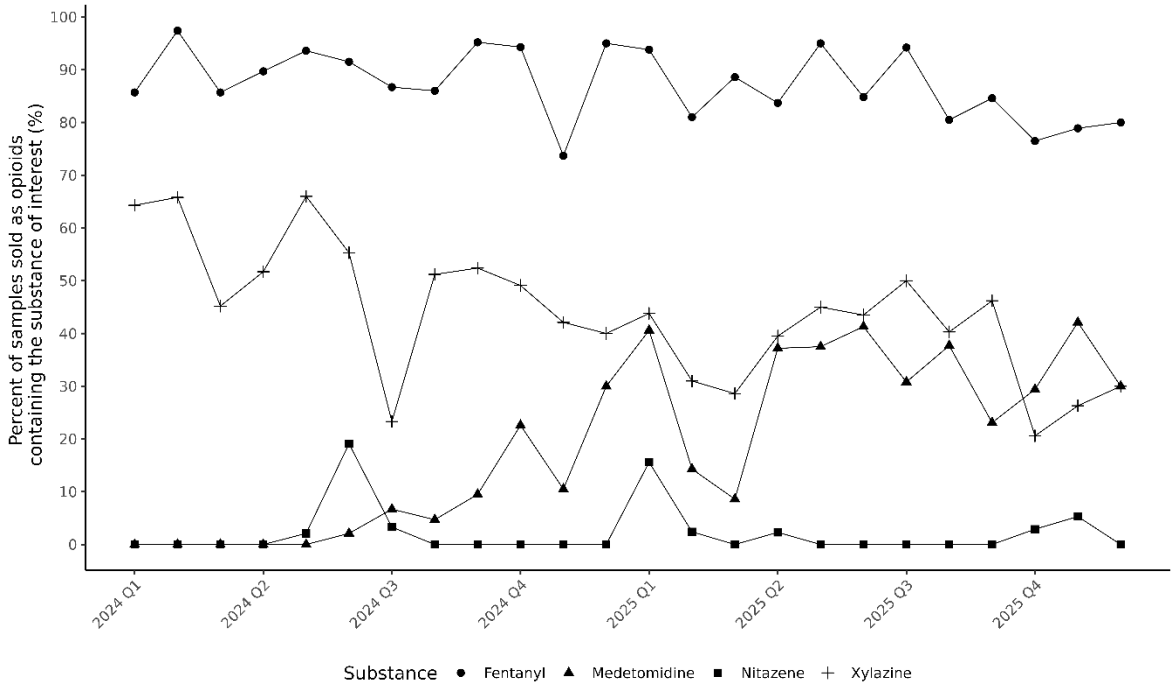
Contact Us

For questions about the NYC Health Department's drug checking program, please email drugchecking@health.nyc.gov.

Key Drug Checking Program Statistics

From November 2021 to December 2025, the NYC Health Department's drug checking program collected a total of 2,869 samples, along with information about what the drugs were sold as. Secondary laboratory testing results confirmed the components of each sample.

The following chart shows the percent of samples sold as opioids with secondary laboratory testing results, which indicate the presence of key substances of interest deemed relevant for public health monitoring (October 1, 2025, to December 31, 2025). Not all substances observed in samples sold as opioids are represented in the chart. Note that the number of samples submitted to the NYC Health Department's drug checking program can impact variation in the percent calculations for any given month.



Quarterly Trends

From October 1, 2025, to December 31, 2025, the NYC Health Department's drug checking program collected a total of 137 samples, along with information about what the drugs were sold as. Secondary laboratory testing results confirmed the components of each sample.

- 63 (46%) samples were sold as opioids. Of those samples, 49 (78%) contained fentanyl, 24 (38%) contained heroin, 21 (33%) contained medetomidine, 15 (24%) contained xylazine, 17 (27%) contained BTMPS, and 2 (3%) contained nitazenes.
- 54 (39%) samples were sold as stimulants, with 26 (49%) of those samples being sold as cocaine or crack. Of the samples sold as cocaine, 20 (77%) contained only cocaine and 6 (23%) contained cocaine **and** other active compounds, including phenacetin, lidocaine, or nicotine.

Detailed Breakdown of Compounds by Substance "Sold As" Category

A total of 137 samples had secondary laboratory testing results available between October 1, 2025, and December 31, 2025. Samples marked with an asterisk (*) may have intentionally or unintentionally been contaminated during the production, consumption, or checking phase.

- 63 samples were sold as **opioids**. Of those samples:
  - 49 contained fentanyl
  - 24 contained heroin
  - 21 contained medetomidine
  - 17 contained BTMPS
  - 15 contained xylazine
  - 3 contained carfentanil
  - 2 contained a nitazene (specifically N-pyrrolidino ethylene isotonitazene or pro/isotonitazene)
  - 1 contained methamphetamine
  - 1 contained a benzodiazepine (specifically bromazolam)
- 56 samples were sold as **stimulants**. Of those samples:
  - 26 samples were sold as **cocaine or crack**. Of those samples:
    - 20 contained only cocaine
    - 3 contained cocaine and lidocaine*
    - 2 contained cocaine and phenacetin*
    - 1 contained cocaine and nicotine*
  - 16 samples were sold as **MDMA, MDA, or ecstasy**. Of those samples:
    - 8 contained only MDMA
    - 2 contained only methamphetamine
    - 1 contained methamphetamine and cocaine*
    - 1 contained MDMA and cocaine*
    - 1 contained caffeine and methamphetamine*
    - 1 contained methamphetamine and DMSO
    - 1 contained MDMA, MDA and eutylone*
    - 1 did not contain any active substances
  - 7 samples were sold as **methamphetamine**. Of those samples:
    - 4 contained only methamphetamine
    - 2 contained methamphetamine and ketamine*
    - 1 contained methamphetamine and cocaine*
  - 3 samples were sold as **Adderall** (which contained methamphetamine)
  - 2 samples were sold as **Amphetamine**. Of those samples:
    - 1 sample contained only amphetamine
    - 1 sample contained amphetamine, caffeine and ketamine*
  - 1 sample was sold as **4-MMC** (which contained 4-MMC and 4-Chloromethcathionone)*
  - 1 sample was sold as **2-MMC** (which contained only 2-MMC)

- 1 sample was sold as **benzodiazepines** (which contained alprazolam)
- 12 samples were sold as **psychedelics or dissociatives**. Of those samples:
    - 5 samples were sold as **ketamine**. Of those samples:
        - 3 contained only ketamine
        - 2 contained ketamine and cocaine *
    - 2 samples were sold as **5-MeO-DMT** (which contained only 5-MeO-DMT)
    - 1 sample was sold as **2C-D** (which contained only 2C-D)
    - 1 sample was sold as **5-MeO-MiPT** (which contained 5-MeO-MiPT, 5-MeO-DiPT, and 5-MeO-DMT)*
    - 1 sample was sold as **LSD** (which did not contain any active substances)
    - 1 sample was sold as **2C-B** (which contained only 2C-B)
- 5 samples were sold as "**other**." Of those samples:
    - 3 samples were sold as **testosterone** (which contained only testosterone)
    - 1 sample was sold as **SR-17018** (lab results unavailable)
    - 1 sample was sold as **7-OH** (which contained only 7-OH)

Additionally, there were 30 samples with secondary laboratory testing results that did not have "sold as" information. The laboratory substances associated with these samples are omitted from this report.

Glossary of Terms

This glossary provides brief definitions of the substances identified by the NYC Health Department's drug checking program in Quarter 4 2025, along with the potential risks associated with their use. Individual experience with substances depends on a wide range of factors, including the characteristics of the drugs being used, physical and mental state of the individual using the substance, and physical and social environments in which the use occurs. These definitions are not exhaustive and do not capture the complexity of drugs or diverse experiences of the people who use them. For more information on drugs, harm reduction strategies, and other drug checking glossaries, consider complementary information provided by other harm reduction organizations (such as the National Harm Reduction Coalition or NEXT Distro) or other public health organizations that operate drug checking programs (such as the New York State Department of Health Drug Checking Service, Toronto's Drug Checking Service, or the Substance Drug Checking program at the University of Victoria).

Substance Name	Information on Substances and Substance-Related Terms
2C-B	2C-B (2,5-dimethoxy-4-bromophenethylamine) is a synthetic stimulant hallucinogen. Similar to other 2C drugs, reported adverse effects include sweating, nausea, vomiting, high heart rate, elevated blood pressure, high temperature, confusion, seizures, neuromuscular excitability or injury, agitation, serotonin toxicity, psychosis, or hallucinations.
2C-D	2C-D (2,5-Dimethoxy-4-methylphenethylamine) is a synthetic stimulant hallucinogen. Similar to other 2C drugs, reported adverse effects include sweating, nausea, vomiting, high heart rate, elevated blood pressure, high temperature, confusion, seizures, neuromuscular excitability or injury, agitation, serotonin toxicity, psychosis, or hallucinations.
2C-E	2C-E (2,5-dimethoxy-4-ethylphenethlamine) is a synthetic stimulant hallucinogen. Similar to other 2C drugs reported adverse effects include sweating, nausea, vomiting, high heart rate, elevated blood pressure, high temperature, confusion, seizures, neuromuscular excitability or injury, agitation, serotonin toxicity, psychosis, and hallucinations.
2-MMC	2-MMC (2-Methylmethcathinone) is a synthetic cathinone. Adverse effects of synthetic cathinones and synthetic cathinone derivatives include elevated heart rate, blood pressure, insomnia, hallucinations, agitation, and paranoia. Episodes of psychosis have been reported with

	chronic use. Cases of serotonin toxicity, elevated temperature, muscle, kidney, and liver injury, abnormal heart rhythm, seizures, and death have been reported. Chronic use can result in physical and psychological dependence and withdrawal may occur upon stopping use.
4-CMC	4-CMC (4-chloromethcathinone) is a synthetic cathinone. Adverse effects of synthetic cathinones and synthetic cathinone derivatives include elevated heart rate, blood pressure, insomnia, hallucinations, agitation, paranoia. Episodes of psychosis have been reported with chronic use. Cases of serotonin toxicity, elevated temperature, muscle, kidney, and liver injury, abnormal heart rhythm, seizures, and death have been reported. Chronic use can result in physical and psychological dependence and withdrawal may occur upon stopping use.
4-MMC	4-MMC (4-methylmethcathinone) is a synthetic cathinone. Adverse effects of synthetic cathinones and synthetic cathinone derivatives include elevated heart rate, blood pressure, insomnia, hallucinations, agitation, and paranoia. Episodes of psychosis have been reported with chronic use. Cases of serotonin toxicity, elevated temperature, muscle, kidney, and liver injury, abnormal heart rhythm, seizures, and death have been reported. Chronic use can result in physical and psychological dependence and withdrawal may occur upon stopping use.
5-MeO-DMT	5-MeO-DMT (5 methoxy-N,N-dimethyl tryptamine) is a methoxylated tryptamine derivative. It is structurally similar to 5-MeO-DiPT and bufotenine. Adverse effects associated with substituted psychedelic tryptamines in general include nausea, vomiting, decreased appetite, dizziness, paresthesias (numbness, tingling, or other changes in sensation), sweating, anxiety, mood alterations, time distortion, confusion, abnormal reflexes, rigidity, problems with coordination, weakness, dysthestheisa (unpleasant or abnormal sensation of touch), drowsiness. It may manifest as severe anxiety, agitation, paranoia, bizarre behavior, elevated blood pressure, high heart rate and blood pressure, abnormal heart rhythm, muscle injury (rhabdomyolysis), serotonin toxicity, or hyperthermia (elevated temperature). Death may also be secondary to behavioral effects.
5-MeO-MiPT	5-MeO-MiPT (5-methoxy-N,N-methyl-N-isopropyltryptamine) is a methoxylated tryptamine derivative. It is an analogue of 5-Meo-DiPT. Adverse effects

	associated with substituted psychedelic tryptamines in general include nausea, vomiting, decreased appetite, dizziness, paresthesias (numbness, tingling, or other changes in sensation), sweating, anxiety, mood alterations, time distortion, confusion, abnormal reflexes, rigidity, problems with coordination, weakness, dysthestheisa (unpleasant or abnormal sensation of touch), drowsiness. It may manifest as severe anxiety, agitation, paranoia, bizarre behavior, elevated blood pressure, high heart rate and blood pressure, abnormal heart rhythm, muscle injury (rhabdomyolysis), serotonin toxicity, or hyperthermia (elevated temperature). Death may also be secondary to behavioral effects.
7-OH	7-OH (7-hydroxymitragynine) is an alkaloid found in kratom in small amounts (generally <2% total alkaloids). It is also formed in the body through breakdown of mitragynine, another kratom alkaloid. Currently there are products on the market that are sold with high concentrations of 7-OH that is synthesized from kratom. 7-OH is known to have activity at the mu opioid receptor. Use of 7-OH products has been associated with higher risk for dependence, withdrawal, use disorder, and toxicity. Deaths associated with 7-OH use have been reported.
Alprazolam	Alprazolam (Xanax) is a short-acting benzodiazepine often used to treat anxiety. In overdose it can cause heavy sedation, slowed or stopped breathing or unresponsiveness. The risk is higher if used with other sedating substances like opioids or alcohol.
Amphetamine	Amphetamine is a stimulant. Adverse effects can include heart problems (such as abnormal heart rhythm or rate, heart attack, or heart failure), high blood pressure, hallucinations, psychosis, or kidney or muscle injury.
Bromazolam	Bromazolam is a designer benzodiazepine that is structurally related to alprazolam (Xanax). It has never been approved for medical use and data on pharmacology and toxicity are limited. Drugs in the benzodiazepine class generally carry risk of tolerance and dependence with regular use. Overdose can cause sedation and problems with breathing, especially if combined with other sedating substances.
BTMPS	BTMPS (Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate) is an industrial chemical used as a light stabilizer in plastics, as

	well as other commercial uses. Data on clinical effects and safety in humans are limited. Subjective reports for people who use drugs have indicated that BTMPS can smell like bug spray or plastic when smoked. Use has been associated with blurred vision, nausea, and coughing.
Caffeine	Caffeine is a stimulant. It is hypothesized to be used as a cutting agent in opioid samples because it is legal, cheap, and easy to access. It also vaporizes heroin at a lower temperature when smoked. Adverse effects can include anxiety, restlessness, and rapid heart rate.
Carfentanil	Carfentanil is a synthetic opioid that is highly potent (100 times stronger than fentanyl). It can lead to toxicity and overdose, even with exposure to very small amounts, increasing risk for overdose death. During an overdose, carfentanil can lead to unresponsiveness or decreased or stopped breathing.
Cocaine	Cocaine is a stimulant. Adverse effects can include seizure, stroke, heart attack, abnormal heart rhythm, muscle breakdown, or kidney injury.
DMSO	DMSO is an industrial solvent. DMSO is an approved active ingredient with low toxicity, frequently used in anti-inflammatory ointments. Side effects of DMSO include local skin reactions, headache, loss of taste and garlic breath odor, nausea and drowsiness. In very large doses there are limited case reports of serious adverse events including liver and kidney toxicity.
Eutylone	Eutylone is a synthetic cathinone. Adverse effects of synthetic cathinones and synthetic cathinone derivatives include elevated heart rate, blood pressure, insomnia, hallucinations, agitation, and paranoia. Episodes of psychosis have been reported with chronic use. Cases of serotonin toxicity, elevated temperature, muscle, kidney, and liver injury, abnormal heart rhythm, seizures, and death have been reported. Chronic use can result in physical and psychological dependence and withdrawal may occur upon cessation of use.
Fentanyl	Fentanyl is a highly potent opioid with a high risk for overdose. During an overdose, it can lead to unresponsiveness and decreased or stopped breathing.
Heroin	Heroin is an opioid that is derived from the poppy plant. During an overdose, it can cause unresponsiveness or slowed or stopped breathing. Heroin is less potent than fentanyl.

Ketamine	Ketamine is an anesthetic that is similar to phencyclidine (PCP). Adverse effects can include hallucinations, confusion, abnormal behavior, nausea or vomiting, or hypertension. Depending on the dose, it can also cause breathing changes, sedation, abnormal heart rate, seizures, or abnormal heart rhythm. Chronic use has been associated with bladder and urinary tract problems. There are also reports of severe abdominal pain and cognitive impairment with chronic use. Chronic use may lead to tolerance and dose escalation.
Lidocaine	Lidocaine is a local anesthetic and numbing agent commonly used in dentist offices and for topical pain relief. In very high doses, lidocaine can cause heart problems or seizures.
LSD	LSD (Lysergic acid diethylamide) is a hallucinogen that acts on serotonin receptors. Adverse effects can include paranoia, mood fluctuations, elevated heart rate, or elevated blood pressure. Rare toxic effects of seizure or muscle injury can occur.
MDA	MDA (3,4-methylenedioxyamphetamine) is a hallucinogenic amphetamine, similar to MDMA. Adverse effects can include dizziness, hyperactivity, decreased appetite, pupillary dilation, headache, anxiety, or disorientation. Rare severe toxic effects include low sodium, seizures, elevated body temperature, muscle rigidity, or muscle or kidney injury. The compound has mostly stimulant effects with lesser hallucinogenic properties. It is also a minor metabolite of MDMA.
MDMA	MDMA (3,4-methylenedioxymethamphetamine) is a hallucinogenic amphetamine. Adverse effects can include dizziness, hyperactivity, decreased appetite, headache, anxiety, or disorientation. Rare severe toxic effects include low sodium, seizures, elevated body temperature, or muscle or kidney injury.
Medetomidine	Medetomidine is an alpha-2 agonist similar to xylazine but is reported to be more potent and have longer effects. The effects of medetomidine can include sedation, analgesia (pain relief), muscle relaxation, anxiolysis (anxiety reduction), bradycardia (slow heart rate), hypotension (low blood pressure), hyperglycemia (high blood sugar), or hallucinations. In clinical overdose encounters where medetomidine is detected or suspected, the most prominent symptoms that have been reported by health

	care providers are low heart rate and sedation. A severe withdrawal syndrome (including elevated heart rate, elevated blood pressure, agitation, waxing or waning mental status, nausea or vomiting that is difficult to control, sweating, or severe opioid withdrawal) has been associated with medetomidine exposure. Read more about responding to withdrawal associated with medetomidine at bit.ly/4bYua2f.
Methamphetamine	Methamphetamine is a stimulant. Adverse effects can include heart problems (such as abnormal heart rhythm or rate, heart attack, or heart failure), high blood pressure, hallucinations, psychosis, or kidney or muscle injury.
N-pyrrolidino ethylene isotonitazene	N-pyrrolidino ethylene isotonitazene is a synthetic opioid in the nitazene class. Data specific to N-pyrrolidino ethylene isotonitazene is limited. Nitazenes cause opioid effects and are reversible with naloxone. Within the nitazene class potency can vary.
Phenacetin	Phenacetin is a pain reliever that may cause kidney or liver problems with long-term use. It was removed from the market in the U.S. and Europe due to causing kidney damage. Phenacetin use is associated with increased risk of urothelial cancer. Phenacetin is a cutting agent primarily used in cocaine due to its similar analgesic and physical properties.
Protonitazene	Protonitazene is a synthetic opioid in the nitazene class. Nitazenes cause opioid effects and are reversible with naloxone. Within the nitazene class potency can vary. Protonitazene is estimated to be three times more potent than fentanyl based on in vitro data. Depending on someone's tolerance even small amounts of a highly potent nitazene could cause clinically significant opioid effects and overdose risk.
SR-17018	SR-17018 is a research opioid. Data on human use is limited. Animal studies have demonstrated opioid effects and potential preference for certain signaling pathways. This is an investigational opioid. Human clinical trials have not been conducted. Further research work is being done to try to create new and better versions of this compound for potential trials.
Xylazine	Xylazine is an alpha-2 agonist and long-acting veterinary sedative. Especially if combined with other sedating medications, it can cause unresponsiveness, low blood pressure, slowed heart rate, or decreased breathing.

	Xylazine use has been associated with skin ulcers or wounds. Chronic use can also lead to dependence and a withdrawal syndrome that can cause irritability, anxiety, or dysphoria (low mood).

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