



Purpose: This report provides up-to-date information regarding the drug supply in Philadelphia, Pennsylvania, United States of America.

Overview: Traditional drugs (e.g., heroin, fentanyl, cocaine, methamphetamine) are commonly identified among drug samples in cities across the United States, albeit at varying purities and combinations. Novel psychoactive substances (NPS) continue to appear within the drug supply, masked as traditional drugs or added to traditional drug preparations. Nationally, the drug supply remains a dynamic and evolving environment, especially relating to primary active drug components and cutting agents or adulterants added to drug preparations. The drug supply and drug use trends can be different from city to city or even within a given community, requiring specific regional or local assessments. Accurate understanding of drug materials and the drug supply in real-time is imperative for effective public health and public safety preparedness and response.

Objective: A partnership between the Center for Forensic Science Research and Education (CFSRE) and the Philadelphia Department of Public Health (PDPH) has been established to accurately assess the drug supply in Philadelphia, Pennsylvania. This initiative was established as a comprehensive effort examining various drug materials and drug forms. Select drug testing results from samples obtained within the city were compiled for preparation of this report. The results reported herein represent a subset of the drug supply and not its entirety.

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Summary and Key Findings:

- ▶ 90 samples were reported between March and early-May 2022
- ▶ Fentanyl-xylazine (tranq-dope) proportions varied greatly
- ▶ Two cocaine (coke) samples contained trace levels of fentanyl, while methamphetamine samples were not adulterated
- ▶ Most "heroin"/dope samples contained fentanyl and xylazine
- ▶ *para*-Fluorofentanyl continues its presence in dope samples
- ▶ Two counterfeit oxycodone tablets contained fentanyl
- ▶ Tenocyclidine was detected in samples purported to be "PCP"

55

"Heroin" / Dope
(Powder in Glassine Bag)

28

Powders / Crystals
(7 Coke, 17 Crack, & 4 Meth)

4

Pills / Tablets
(2 Oxycodone, 1 Adderall, & 1 Methadone)

3

Other
(1 Weed & 2 PCP)



Date	Suspected	Drugs Identified
3/1/2022	Coke	Cocaine (1p), Lidocaine (0.3p), Levamisole (trace)
3/15/2022	Coke	Cocaine (1p), Fentanyl (0.1p), Lidocaine (0.3p), Xylazine (trace) → ①
3/15/2022	Coke	Cocaine (1p), Fentanyl (0.08p), Lidocaine (1.1p), Xylazine (0.1p) ← ①
3/24/2022	Coke	Cocaine (1p), Lidocaine (0.9p), Dimethylsulfone (0.3p) ← ②
3/31/2022	Coke	Cocaine (1p), Dimethylsulfone (>10p), Lidocaine (0.7p) → ②
3/31/2022	Coke	Cocaine (1p), Lidocaine (0.9p) ← ③
3/31/2022	Coke	Cocaine (1p), Phenacetin (0.6p), Levamisole (0.3p)
3/1/2022	Crack	Cocaine → ③
3/15/2022	Crack	Cocaine
3/15/2022	Crack	Cocaine (1p), Lidocaine (0.4p) ← ④
3/15/2022	Crack	Cocaine (1p), Lidocaine (0.9p), Dimethylsulfone (0.3p)
3/15/2022	Crack	Cocaine (1p), Levamisole (0.5p), Lidocaine (trace)
3/24/2022	Crack	Cocaine
3/24/2022	Crack	Cocaine, Levamisole (trace)
3/24/2022	Crack	Cocaine
3/24/2022	Crack	Cocaine (1p), Levamisole (0.2p)
3/24/2022	Crack	Cocaine (1p), Levamisole (0.15p) → ④
3/24/2022	Crack	Cocaine
3/24/2022	Crack	Cocaine (1p), Levamisole (0.2p)
3/24/2022	Crack	Cocaine
3/31/2022	Crack	Cocaine (1p), Levamisole (trace)
3/31/2022	Crack	Cocaine
4/14/2022	Crack	Cocaine ← ⑤
4/14/2022	Crack	Cocaine → ⑤

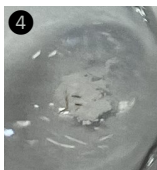
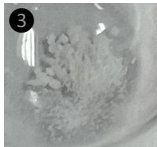
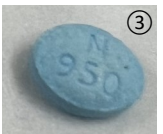


Drug Checking — Q2 2022

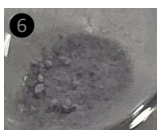
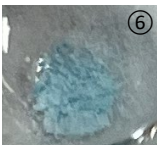
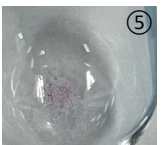
Philadelphia, Pennsylvania, USA

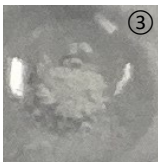
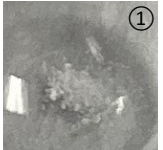
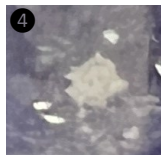
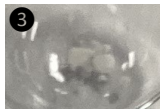
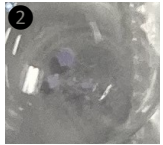
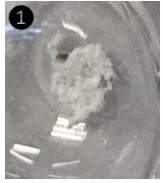


Date	Suspected	Drugs Identified
3/15/2022	Meth	Methamphetamine → ①
3/24/2022	Meth	Methamphetamine
3/31/2022	Meth	Methamphetamine
4/14/2022	Meth	Methamphetamine
3/1/2022	Methadone	Methadone
3/15/2022	Oxycodone	Fentanyl (1p), Acetaminophen (1.5p), Lidocaine (2p), Tramadol (1.3p), Xylazine (1p) [Fentanyl Byproducts] ← ①
3/15/2022	Oxycodone	Fentanyl (1p), Acetaminophen (>10p) [Fentanyl Byproducts] → ②
3/24/2022	Adderall	Amphetamine → ③
3/15/2022	Weed	THC and Cannabinoids
3/15/2022	PCP	Tenocyclidine (1p), Nicotine (0.2p) ← ②
3/31/2022	PCP	Tenocyclidine (1p), Nicotine (trace)



Date	Suspected	Drugs Identified
3/1/2022	Dope	Fentanyl (1p), Heroin (1p), Xylazine (0.3p) [Fentanyl and Heroin Byproducts]
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.2p), Xylazine (trace) [Fentanyl Byproducts] → ④
3/1/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts] ← ③
3/1/2022	Dope	para-Fluorofentanyl (1p), Fentanyl (0.7p), Xylazine (16p) [Fentanyl and para-Fluorofentanyl Byproducts]
3/1/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (trace), Xylazine (15p), Lidocaine (2p), Caffeine (1p) [Fentanyl Byproducts]
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.25p), Xylazine (0.2p) [Fentanyl Byproducts]
3/1/2022	Dope	Fentanyl (1p), Xylazine (2p) [Fentanyl Byproducts] → ⑤
3/1/2022	Dope	Fentanyl (1p), Caffeine (0.3p), Xylazine (trace) [Fentanyl Byproducts]
3/1/2022	Dope	Fentanyl (1p), Xylazine (1p), Quetiapine (0.1p) ← ④
3/1/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.6p), Xylazine (18p), Lidocaine (trace) [para-Fluorofentanyl Byproducts]
3/15/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.7p), Xylazine (10p) [Fentanyl and para-Fluorofentanyl Byproducts]
3/15/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts]
3/15/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (trace), Xylazine (19p) [Fentanyl and para-Fluorofentanyl Byproducts]
3/15/2022	Dope	para-Fluorofentanyl (1p), Fentanyl (0.5p), Xylazine (3p)
3/15/2022	Dope	Fentanyl (1p), Xylazine (0.3p), Caffeine (trace) [Fentanyl Byproducts] → ⑥
3/15/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts]
3/15/2022	Dope	Fentanyl (1p), Xylazine (1.3p) [Fentanyl Byproducts] ← ⑤
3/15/2022	Dope	Fentanyl (1p), Xylazine (1.5p) [Fentanyl Byproducts]
3/24/2022	Dope	Fentanyl (1p), Xylazine (1.5p) [Fentanyl Byproducts]
3/24/2022	Dope	Fentanyl (1p), Xylazine (7p) [Fentanyl Byproducts]
3/24/2022	Dope	Heroin (1p), Fentanyl (0.4p), Quinine (trace) [Heroin and Fentanyl Byproducts] → ⑦
3/24/2022	Dope	Fentanyl (1p), Xylazine (3p), Heroin (0.1p), Caffeine (0.3p), Lidocaine (0.2p) [Fentanyl Byproducts]
3/24/2022	Dope	Fentanyl (1p), Xylazine (8p) [Fentanyl Byproducts]
3/31/2022	Dope	Fentanyl (1p), Xylazine (4p) [Fentanyl Byproducts]
3/31/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.1p), Xylazine (0.3p), Cocaine (trace) [Fentanyl Byproducts]
3/31/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.2p), Xylazine (3p) [Fentanyl Byproducts] ← ⑥





Date	Suspected	Drugs Identified
3/31/2022	Dope	Fentanyl (1p), Xylazine (3p) [Fentanyl Byproducts]
4/14/2022	Dope	Fentanyl (1p), Xylazine (14p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (2p) [Fentanyl Byproducts] ← ①
4/14/2022	Dope	Fentanyl (1p), Xylazine (4p)
4/14/2022	Dope	Fentanyl, Xylazine [Residue]
4/14/2022	Dope	Fentanyl (1p), Xylazine (4p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (4p) → ①
4/14/2022	Dope	Fentanyl (1p), Lidocaine (4p), Xylazine (50p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (5p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (5p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (12p) ← ②
4/14/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (5p), Xylazine (50p) [para-Fluorofentanyl Byproducts] → ②
4/14/2022	Dope	Fentanyl, Xylazine [Residue]
4/14/2022	Dope	Fentanyl, Xylazine [Residue]
4/14/2022	Dope	Fentanyl (1p), Xylazine (2p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (1p)
4/14/2022	Dope	Fentanyl, Xylazine [Residue]
4/14/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (trace), Xylazine (11p) [Fentanyl Byproducts] → ③
4/14/2022	Dope	Fentanyl (1p), Xylazine (5p)
4/14/2022	Dope	Fentanyl (1p), Xylazine (10p) [Fentanyl Byproducts] ← ③
5/3/2022	Dope	Fentanyl (1p), para-Fluorofentanyl (0.6p), Xylazine (5.3p), Caffeine (trace), [Fentanyl Byproducts]
5/3/2022	Dope	Fentanyl (1p), Xylazine (3.2p) [Fentanyl Byproducts]
5/3/2022	Dope	Fentanyl (1p), Xylazine (2.5p) [Fentanyl Byproducts] → ④
5/3/2022	Dope	Fentanyl (1p), Xylazine (2.4p) [Fentanyl Byproducts]
5/3/2022	Dope	Fentanyl (1p), Xylazine (1.5p) [Fentanyl Byproducts]
5/3/2022	Dope	Fentanyl (1p), Xylazine (0.5p) [Fentanyl Byproducts]
5/3/2022	Dope	Fentanyl (1p), Xylazine (1p) [Fentanyl Byproducts] ← ④

— — — — END OF RESULTS — — — —

Semi-Quantitative Assessment of Drug Portions: The results reported herein are designated in a semi-quantitative manner by calculating parts ("p") based on data acquired during laboratory testing. In general, the primary drug is assigned as one part (1p) and other drugs are reported accordingly in proportion to the primary drug (e.g., 10p, 0.3p). Reported drug parts do not translate to drug purity.

Examples: Amount of xylazine is four times greater than fentanyl = Fentanyl (1p), Xylazine (4p)
Amount of heroin is half the amount of fentanyl = Fentanyl (1p), Heroin (0.5p)

Note: Future reports will include full quantitative data (i.e., drug purity) for fentanyl, heroin, xylazine, and other primary drugs and adulterants of interest.

Key for [Drug Byproducts]: The below byproducts, precursors, and/or synthesis intermediates were detected in samples when denoted.

- ⇒ **Fentanyl:** 4-ANPP, Phenethyl-4-ANPP, Acetylfentanyl, Benzylfentanyl, N-Propionyl Norfentanyl, Bipiperidyl 4-ANPP
- ⇒ **para-Fluorofentanyl:** para-Fluoro 4-ANPP, para-Fluoro Phenethyl 4-ANPP
- ⇒ **Heroin:** 6-Acetylmorphine, Acetylcodeine, Papaverine