Results from 169 samples checked

January 13 – 26, 2024

Key findings

- 13% of the expected[1] fentanyl samples[5] were known to be **associated with an overdose**: all of these samples contained a high-potency opioid (an opioid as strong as or stronger than fentanyl) and almost all contained other central nervous system depressants, like benzodiazepine-related drugs and xylazine
- 51% of the expected[1] fentanyl samples[5] **contained a benzodiazepine-related drug** – 15% of these samples contained multiple benzodiazepine-related drugs
- 41% of the expected[1] fentanyl samples[5] **contained fluorofentanyl** (up to 2 times stronger than fentanyl)
- 14% of the expected[1] fentanyl samples[5] **contained a methylfentanyl-related drug** (roughly as strong as fentanyl)
- 14% of the expected[1] fentanyl samples[5] **contained xylazine** (veterinary tranquilizer)
- 5% of the expected[1] fentanyl samples[5] **contained medetomidine/dexmedetomidine**[7] (veterinary tranquilizer) – learn more about this "new" drug we have identified in Toronto's unregulated drug supply
- 1% of the expected[1] fentanyl samples[5] **contained a nitazene opioid** (up to 10 times stronger than fentanyl)
- 38% of the expected[1] fentanyl samples[5] **contained multiple high-potency opioids**, including fentanyl, fluorofentanyl, a methylfentanyl-related drug, and nitazene opioids
- 26% of the expected[1] fentanyl samples[5] **did not contain fentanyl** – many of these samples instead contained fluorofentanyl or a methylfentanyl-related drug in combination with benzodiazepine-related drugs
- Amount of drugs found in expected[1] fentanyl drug samples[2]:

In 32 expected[1] fentanyl drug samples[2]:

7.9% was the **average**[3] **amount of fentanyl found**

3.1 – 15.3% was the **range**[4] **of fentanyl found** in half of the drug samples[2]

In 19 expected[1] fentanyl drug samples[2]:

6.9% was the **average**[3] **amount of fluorofentanyl found**	**4.8 – 10.3%** was the **range**[4] **of fluorofentanyl found** in half of the drug samples[2]
In 25 expected[1] fentanyl drug samples[2]:	
2.1% was the **average**[3] **amount of bromazolam found**	**1.0 – 4.1%** was the **range**[4] **of bromazolam found** in half of the drug samples[2]
In 4 expected[1] fentanyl drug samples[2]:	
0.7% was the **average**[3] **amount of xylazine found**	**0.4 – 10.3%** was the **range**[4] **of xylazine found** in half of the drug samples[2]

Expected fentanyl drugs samples

- 69% (38) of the expected[1] fentanyl drug samples[6] **contained fentanyl and other drugs**, including:
  - 87% (33) contained caffeine
  - 61% (23) contained at least one additional high-potency opioid **(!)**:
    - 47% (18) contained fluorofentanyl **(!)**
    - 18% (7) contained a methylfentanyl-related drug **(!)**
    - 3% (1) contained metonitazene **(!)**
  - 55% (21) contained at least one benzodiazepine-related drug **(!)**:
    - 53% (20) contained bromazolam **(!)**
    - 5% (2) contained flubromazepam **(!)**
    - 5% (2) contained desalkylgidazepam **(!)**
  - 32% (12) contained at least one veterinary tranquilizer **(!)**:
    - 21% (8) contained xylazine **(!)**
    - 11% (4) contained medetomidine/dexmedetomidine[7] **(!)**
  - 3% (1) contained phenacetin **(!)**
  - 3% (1) contained bromofentanyl **(!)**

Unexpected noteworthy drugs found in other expected drug samples

- 6% (5) of the remaining drug samples,[6] meaning drug samples[2] that weren't expected[1] to be fentanyl, **contained an unexpected noteworthy drug**, including:
  - 60% (3) of **expected**[1] **crack cocaine drug samples**[2] contained phenacetin **(!)**
  - 50% (1) of **expected**[1] **heroin drug samples**[2] contained fentanyl **(!)**
  - One **expected**[1] **oxycodone (OxyContin) substance**[2] **that did not contain**[8] **oxycodone (OxyContin)** contained isotonitazene/protonitazene[7] **(!)**

Not sure what some of these substances are?
View our drug dictionary: www.drugchecking.community/drug-dictionary/

Notes

1 | Expected (drug): When a sample is submitted to be checked, the drug that sample was bought or got as is recorded. We call it the "expected drug". Knowing the expected drug helps us tailor our harm reduction advice. It also helps us understand contamination to drugs rather than combinations of drugs (e.g., fentanyl was found in a heroin sample rather than fentanyl and heroin were found together).

2 | Drug samples: Could be a small amount of powder, crystals, rocks, blotter, or liquid, or a crushed bit of a pill.

3 | Average amount: We arrange the amounts of a substance found as a proportion of the total fentanyl drug sample from smallest to largest, determine the median (i.e., the middle number), and use that number as the "average". More information about the amounts of substances found as a proportion of the total sample submitted can be found on **our website**.

4 | Range: Known as the interquartile range, represents the middle 50% of the amounts of a substance found as a proportion of the total fentanyl drug sample. More information about the amounts of substances found as a proportion of the total sample submitted can be found on **our website**.

5 | Samples: Includes both drugs and used drug equipment. Drugs could be a small amount of powder, crystals, rocks, blotter, or liquid, or a crushed bit of a pill. Used equipment could be a used cooker or filter, or leftover liquid from a syringe.

6 | Reason for reporting only drug samples: While Toronto's Drug Checking Service checks both drugs and used equipment, drug equipment – like cookers – are often re-used. The mass spectrometry technologies used for this drug checking service are so sensitive that very trace amounts of substances may be found. This means that when equipment is re-used, substances from past use may present in the results for the sample that is being checked. This can interfere with up-to-date drug market monitoring, so we've noted when we exclude used equipment from this report.

7 | Reporting similar substances together: These substances have a very similar chemical structure, and it is not currently possible for Toronto's Drug Checking Service to differentiate between them. For this reason, we report these substances together. For more information on these substances, view **our drug dictionary**.

8 | Drug samples that unexpectedly contain high-potency opioids or benzodiazepine-related drugs and not the expected drug: Our reports highlight unexpected noteworthy drugs found in all checked drug samples. When high-potency opioids or benzodiazepine-related drugs are found unexpectedly in a drug sample and the expected drug is not present, we flag it but are hesitant to consider it contamination of the expected drug. Instead, we assume there is an issue with the expected drug: the person who sold or provided the drugs accidentally mixed up their drugs, the service user accidentally mixed up their drugs, or the expected drug was recorded incorrectly during sample collection. These samples require special consideration.

(!) | Unexpected noteworthy drug: "Noteworthy drugs" are drugs that (i) are linked to overdose or other adverse effects, (ii) are highly potent or related to highly potent drugs, or (iii) may not be desired by some service users. Noteworthy drugs are flagged when they are unexpectedly found in checked samples.

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