Unregulated fentanyl supply trends: Toronto, Ontario

March 7 – 20, 2026

To date, Toronto's Drug Checking Service has analyzed over 20,000 samples of drugs or used drug equipment donated by people who use drugs. Of those 20,000 samples, 98% were collected at a supervised consumption site. Thanks to them, we have been able to provide the most timely and comprehensive data on Ontario's unregulated drug supply. This data informs care (including treatment and recovery), public health and safety policy, and research in Ontario and beyond. Learn more about the current state of Ontario's unregulated opioid supply, as evidence that services for people who actively use drugs (specifically, opioids) remain critical, as well as the contribution of Ontario's supervised consumption sites to our understanding of the unregulated drug supply.

Despite being federally funded by Health Canada until the end of 2027, the decision announced on March 13 to end funding for Ontario's Consumption and Treatment Service sites will inevitably impact the effectiveness of our program under the current model. We will keep the community informed.

Between March 7 – 20, 2026, 124 samples[1] were collected from people who use drugs by the collection site members of Toronto's Drug Checking Service, the flagship program of Ontario's Drug Checking Community. Samples were analyzed by analysis site members of the program using gold standard technologies that are validated for overdose prevention drug checking. Of these 124 samples[1], **71% were collected by a supervised consumption site**.

Key findings[4]

- 64 samples were expected[2] to be fentanyl (92% were drug samples[3] and 8% were used drug equipment).
- 8% of the expected[2] fentanyl samples[1] were known to be **associated with an overdose** – all of these samples contained at least one high-potency opioid[5] (an opioid considered to be roughly as strong as or stronger than fentanyl) in combination with a veterinary tranquilizer
- 45% of the expected[2] fentanyl samples[1] **contained multiple high-potency opioids**[5], including fentanyl, fluorofentanyl, carfentanil, and/or a methylfentanyl-related drug. Using high-potency opioids[5] in combination increases the risk of overdose and greater than normal doses of naloxone may be required to reverse an overdose.

- 48% of the expected[2] fentanyl samples[1] **contained fluorofentanyl** (at this time, para-fluorofentanyl is circulating, which is considered to be roughly as strong as fentanyl)
- 14% of the expected[2] fentanyl samples[1] **contained a methylfentanyl-related drug** (at this time, ortho-methylfentanyl is circulating, which is considered to be roughly as strong as fentanyl)
- 11% of the expected[2] fentanyl samples[1] **contained carfentanil** (considered to be up to 100 times stronger than fentanyl)
- 2% of the expected[2] fentanyl samples[1] **contained a nitazene opioid**, including **protodesnitazene**
- 30% of the expected[2] fentanyl samples[1] **did not contain fentanyl** – most of these samples instead contained fluorofentanyl, a methylfentanyl-related drug, and/or carfentanil; one instead contained protodesnitazene
- 81% of the expected[2] fentanyl samples[1] **contained at least one other central nervous and/or respiratory system depressant**, including veterinary tranquilizers, benzodiazepine-related drugs and/or barbiturates. Using high-potency opioids[5] in combination with other central nervous and/or respiratory system depressants increases the risk of dangerous suppression of vitals (e.g., slowing down of breathing, blood pressure, heart rate) – as well as complicates overdose response. **Medetomidine, specifically, may cause a slow heart rate and low blood pressure**.
    - 75% of the expected[2] fentanyl samples[1] **contained a veterinary tranquilizer** – 67% contained **medetomidine** and 9% contained **xylazine**
    - 36% of the expected[2] fentanyl samples[1] **contained a benzodiazepine-related drug**, including **ethylbromazolam**, **desalkylgidazepam**, **bromazolam**, **ethylflualprazolam**, **flualprazolam**, and/or **temazepam**. **We are currently observing a sharp increase in the number of fentanyl samples containing benzodiazepine-related drugs** in Toronto and elsewhere across Ontario.
    - 2% of the expected[2] fentanyl samples[1] **contained a barbiturate**, including **phenobarbital**
- Amount of drugs found in expected[2] fentanyl drug samples[3]:

In 33 expected[2] fentanyl drug samples[3]:			
0.8%	was the **average amount[6] of fentanyl found**	**0.5 – 1.4%**	was the **range[7] of fentanyl found** in half of the drug samples[3]
In 21 expected[2] fentanyl drug samples[3]:			
3.2%	was the **average amount[6] of fluorofentanyl found**	**1.8 – 8.1%**	was the **range[7] of fluorofentanyl found** in half of the drug samples[3]
In 8 expected[2] fentanyl drug samples[3]:			
2.5%	was the **average amount[6] of methylfentanyl-related drugs found**	**0.3 – 4.9%**	was the **range[7] of methylfentanyl-related drugs found** in half of the drug samples[3]

In 32 expected[2] fentanyl drug samples[3]:			
1.2%	was the **average amount[6] of medetomidine found**	**0.7 – 1.5%**	was the **range[7] of medetomidine found** in half of the drug samples[3]
In 6 expected[2] fentanyl drug samples[3]:			
1.6%	was the **average amount[6] of xylazine found**	**1.5 – 2.6%**	was the **range[7] of xylazine found** in half of the drug samples[3]
In 5 expected[2] fentanyl drug samples[3]:			
0.9%	was the **average amount[6] of bromazolam found**	**0.3 – 1.0%**	was the **range[7] of bromazolam found** in half of the drug samples[3]

Unexpected noteworthy drugs found in other expected drug samples

- 7% (4) of the remaining drug samples[3], meaning drug samples[3] that weren't expected[2] to be fentanyl, **contained an unexpected noteworthy drug**, including:
  - 7% (1) of **expected[2] cocaine drug samples[3]** contained **levamisole (!)**
  - 7% (1) of **expected[2] cocaine drug samples[3]** contained **phenacetin (!)**
  - Two **expected[2] oxycodone (OxyContin) drug samples[3] that did not contain oxycodone[9]** contained **isotonitazepyne/protonitazepyne (!)** – **learn more about the presence of nitazene opioids in samples expected to be oxycodone (OxyContin), Percocet, hydromorphone (Dilaudid), hydrocodone, and oxymorphone**

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

Notes

1 | 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. For more information, view our terms of service.

2 | 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).

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

4 | Our key findings for the specified time period are based on results from both drugs and used drug equipment. **There are limitations associated with including results from used drug equipment samples in unregulated drug market monitoring for a specified time period**. Drug equipment – like cookers – are often re-used. The mass spectrometry technologies we use 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 be found and included in results for the sample that is being checked. This can compromise the accuracy of drug market monitoring for a specified time period. For example, the substance was found in the used equipment sample but, if the equipment was re-used, is that substance circulating in the supply now or when the equipment was previously used. This is less of an issue for drug samples, which is why we prefer to rely on results from drug samples for time period-specific unregulated drug market monitoring. However, it is not always possible for a service user to submit a drug sample. We do the best we can with the samples we have access to.

5 | High-potency opioids: We classify an opioid "high-potency" if it is considered to be roughly as strong as or stronger than fentanyl.

6 | 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". For more information, view our **amount of drugs found graph**.

7 | 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. For more information, view our **amount of drugs found graph**.

8 | 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, view our **drug dictionary**.

9 | Drug samples that unexpectedly contain noteworthy drugs and not the expected drug: Our reports highlight unexpected noteworthy drugs found in all checked drug samples. When noteworthy 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.

10 | High-potency opioid contamination: Based on the information we have about this sample, we are reporting it as contaminated with a high-potency opioid. However, it is very unusual that our program finds high-potency opioids unexpectedly in samples expected to be stimulants, psychedelics, and depressants, and these samples always require special consideration. There is increasing consensus in the drug checking community that the unexpected presence of high-potency opioids in other drug types is the product of accidental cross contamination rather than intentional adulteration. Cross contamination may result from poorly cleaned scales, storing drugs together (e.g., storing LSD in a baggie that was originally used for storing cocaine), or using drug equipment with different batches of drugs.

(!) | 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.

About us: Ontario's Drug Checking Community is a national authority and primary source of timely and comprehensive data on Canada's unregulated drug supply. This public health and safety program, which is the provincial expansion of **Toronto's Drug Checking Service**, analyzes samples of drugs and used drug equipment donated by people who use drugs with **gold standard mass spectrometry technologies** at the Centre for Addiction and Mental Health (Clinical Laboratory and Diagnostic Services) or St.

Michael's Hospital (Department of Laboratory Medicine). Technologies used and methods developed from checking tens of thousands of the most complex samples are the best currently available to communities in Ontario for checking unregulated opioids. This is critical because the contamination and unpredictability of the unregulated opioid (and, specifically, fentanyl) supply continues to be the primary driver of fatal and non-fatal drug poisoning, among other harms. The **program's findings** are translated and publicly available to prevent drug-related harm and inform evidence-based responses to the ongoing toxic opioid supply crisis, which include prevention, harm reduction, treatment and recovery, and community safety efforts.

Acknowledgements: We acknowledge the members of our communities that have lost their lives – both in the ongoing toxic drug supply crisis and long before.

We acknowledge that racialized communities and survivors of colonization are disproportionately impacted by the toxic drug supply crisis.

We acknowledge that we operate on Indigenous land, which is home to many diverse First Nations, Inuit, and Métis peoples. Our program is coordinated from Toronto, which is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples.

We know that many of the samples we check are linked to fatal or non-fatal overdose, as well as adverse health events – we acknowledge the people and pain behind the data we share.

We acknowledge that our work is only possible – and we only have access to this data – because people who use drugs donate their drugs to our program in an effort to reduce the harms associated with using unregulated substances and facilitate community-led drug market monitoring and education. We are incredibly fortunate to be trusted by people who use drugs throughout the province.

We acknowledge our collection sites, which are community agencies that are deeply committed to bettering the lives of people who use drugs, have existing and trusting relationships with people who use drugs, and truly understand what is means to provide care and reduce harm. In Toronto, collection site members include: Casey House | Fred Victor | Parkdale Queen West Community Health Centre (Parkdale site) | South Riverdale Community Health Centre (Moss Park site) | Street Health | The Neighbourhood Group (Kensington Market Overdose Prevention Site) | Toronto Shelter and Support Services (Harm Reduction Unit).

We acknowledge that almost all of our samples have been collected by supervised consumption sites.

Our program is coordinated by a small central team that operates from within the Drug Checking Unit at St. Michael's Hospital. We are committed to ensuring our public health and safety program adds value to the communities it serves. If you have any questions, comments, or feedback, please get in touch.

(website) **www.drugchecking.community** | (email) **hello@drugchecking.community** | (IG) **@drugchecking**