

# Toronto's Drug Checking Service

## Unregulated fentanyl supply trends: Toronto

April 4 – 17, 2026

Between [April 4 – 17, 2026](#), 174 samples<sup>1</sup> 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 174 samples<sup>1</sup>, **57% were collected by a supervised consumption site.**

### Key findings<sup>2</sup>

- A [drug alert was issued by Toronto Public Health](#) on April 7 because Toronto Paramedic Services observed an increase in suspected opioid overdose-related deaths between April 3 and 6. During the same period, they responded to 74 suspected opioid overdose calls, which is more than twice the average number of calls recorded over comparable Easter long weekends in the previous three years. Similar alerts were released across the province during this reporting period.
- We detected a “new” nitazene opioid – [N,N-dimethylamino etonitazene](#) – in a sample<sup>1</sup> with an unknown expected<sup>3</sup> drug collected in Toronto on April 9. It was also found in an expected<sup>3</sup> oxycodone (OxyContin) sample<sup>1</sup> collected in Kingston on April 16. N,N-dimethylamino etonitazene has unknown strength and effects.
- We detected a “new” fentanyl-related drug – [cyclopropyl fentanyl/crotonyl fentanyl/methacrylfentanyl](#)<sup>9</sup> – in an expected<sup>3</sup> fentanyl sample<sup>1</sup> collected in Toronto on April 15. Cyclopropyl fentanyl/crotonyl fentanyl/methacrylfentanyl is considered to be roughly as strong as fentanyl.
- 75 samples **were expected<sup>3</sup> to be fentanyl** (93% were drug samples<sup>4</sup> and 7% were used drug equipment)
- 1% of the expected<sup>3</sup> fentanyl drug samples<sup>4</sup> **met service user expectations<sup>5</sup>**, meaning the only drug found was fentanyl. In comparison, all of the expected<sup>3</sup> ketamine drug samples<sup>4</sup>, all of the expected<sup>3</sup> MDMA drug samples<sup>4</sup>, 83% of the expected<sup>3</sup> methamphetamine drug samples<sup>4</sup>, and 81% of the expected<sup>3</sup> cocaine drug samples<sup>4</sup>, respectively, met service user expectations<sup>5</sup>. Unregulated opioids (especially fentanyl) are much more contaminated than other drug types, heavily cut with other drugs service users don't expect, and making it nearly impossible to make informed drug use decisions.

- The **most common composition** of the expected<sup>3</sup> fentanyl drug samples<sup>4</sup> was caffeine, [desalkylgidazepam](#), [fluorofentanyl](#), and [medetomidine](#) (this was the composition of 10% of the expected<sup>3</sup> fentanyl drug samples<sup>4</sup>)
- 7% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> were known to be **associated with an overdose** – all of these samples contained at least one high-potency opioid<sup>6</sup> (an opioid considered to be roughly as strong as or stronger than fentanyl) in combination with a veterinary tranquilizer
- 99% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained at least one high-potency opioid<sup>6</sup>**, including:
  - 80% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained fluorofentanyl** (at this time, para-fluorofentanyl is circulating, which is considered to be roughly as strong as fentanyl)
  - 57% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained [fentanyl](#)**
  - 8% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained a [methylyfentanyl-related drug](#)** (at this time, ortho-methylyfentanyl is circulating, which is considered to be roughly as strong as fentanyl)
  - 5% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained [carfentanil](#)** (considered to be up to 100 times stronger than fentanyl)
  - 3% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained [cyclophosphine](#)** ([unpublished data](#) suggests it is approximately 10 times stronger than fentanyl)
  - 3% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained a nitazene opioid**, including [metonitazepine](#) (considered to be 2 times stronger than fentanyl) and [protodesnitazene](#) (considered to be as strong as fentanyl)
- 40% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained multiple high-potency opioids<sup>6</sup>**. Using high-potency opioids<sup>6</sup> in combination increases the risk of overdose and greater than normal doses of naloxone may be required to reverse an overdose.
- 87% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained at least one other central nervous and/or respiratory system depressant**, including veterinary tranquilizers and/or benzodiazepine-related drugs. Using high-potency opioids<sup>6</sup> 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.](#)
  - 85% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained a veterinary tranquilizer** – 84% contained medetomidine and 3% contained [xylazine](#)
  - 49% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained a benzodiazepine-related drug**, including desalkylgidazepam, [ethylflualprazolam](#), [ethylbromazolam](#), [bromazolam](#), [methylclonazepam](#), [phenazolam](#), [diazepam \(Valium\)](#), and/or [etizolam](#). Read [our memo on the sharp increase we are](#)

currently observing in the number of fentanyl samples containing benzodiazepine-related drugs in Toronto and elsewhere across Ontario.

- 46% of the expected<sup>3</sup> fentanyl drug samples<sup>4</sup> **contained a combination of at least one high-potency opioid** (most commonly fluorofentanyl), **a veterinary tranquilizer** (most commonly medetomidine), and **a benzodiazepine-related drug** (most commonly desalkylgidazepam)
- 8% of the expected<sup>3</sup> fentanyl samples<sup>1</sup> **contained other unexpected noteworthy drugs**<sup>12</sup>, including etodezitramide, methyltetrahydro furanylfentanyl, phenacetin, 4-fluorobutyrylfentanyl (4-FBF)/4-fluoroisobutyryl fentanyl, acetyl fentanyl, cyclopropyl fentanyl/crotonyl fentanyl/methacrylfentanyl, and/or levamisole
- Amount of drugs found in expected<sup>3</sup> fentanyl drug samples<sup>4</sup>:

In 34 expected<sup>3</sup> fentanyl drug samples<sup>4</sup>:

<b>0.5%</b>	was the <b>average amount</b> <sup>6</sup> of <b>fentanyl found</b>	<b>0.4 – 1.5%</b>	was the <b>range</b> <sup>7</sup> of <b>fentanyl found</b> in half of the drug samples <sup>4</sup>
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In 44 expected<sup>3</sup> fentanyl drug samples<sup>4</sup>:

<b>3.4%</b>	was the <b>average amount</b> <sup>7</sup> of <b>fluorofentanyl found</b>	<b>1.5 – 10.8%</b>	was the <b>range</b> <sup>8</sup> of <b>fluorofentanyl found</b> in half of the drug samples <sup>4</sup>
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In 3 expected<sup>3</sup> fentanyl drug samples<sup>4</sup>:

<b>0.5%</b>	was the <b>average amount</b> <sup>7</sup> of <b>methylfentanyl-related drugs found</b>	<b>0.3 – 3.6%</b>	was the <b>range</b> <sup>8</sup> of <b>methylfentanyl-related drugs found</b> in half of the drug samples <sup>4</sup>
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In 48 expected<sup>3</sup> fentanyl drug samples<sup>4</sup>:

<b>0.9%</b>	was the <b>average amount</b> <sup>7</sup> of <b>medetomidine found</b>	<b>0.3 – 1.8%</b>	was the <b>range</b> <sup>8</sup> of <b>medetomidine found</b> in half of the drug samples <sup>4</sup>
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### Unexpected noteworthy drugs<sup>12</sup> found in other expected drug samples

- 9% (9) of the remaining drug samples<sup>4</sup>, meaning drug samples<sup>4</sup> that weren't expected<sup>3</sup> to be fentanyl, **contained an unexpected noteworthy drug**<sup>12</sup>, including:
  - 67% of the **expected<sup>3</sup> oxycodone (OxyContin) drug samples<sup>4</sup>** contained metonitazene – learn more about the presence of nitazene opioids in samples expected to be oxycodone (OxyContin), Percocet, hydromorphone (Dilaudid), hydrocodone, and oxymorphone
  - 13% of the **expected<sup>3</sup> cocaine drug samples<sup>4</sup>** contained levamisole
  - 6% of the **expected<sup>3</sup> cocaine drug samples<sup>4</sup>** contained phenacetin
  - One **expected<sup>3</sup> 2C-B drug sample<sup>4</sup>** that did not contain 2C-B<sup>10</sup> contained phenacetin

- One **expected<sup>3</sup> carfentanil drug sample<sup>4</sup> that did not contain carfentanil<sup>10</sup>** contained fentanyl, fluorofentanyl, a methylfentanyl-related drug, and xylazine
- One **expected<sup>3</sup> oxycodone (OxyContin) drug sample<sup>4</sup> that did not contain oxycodone<sup>10</sup>** contained fentanyl and xylazine
- One **expected<sup>3</sup> Percocet drug sample<sup>4</sup> that did not contain acetaminophen or oxycodone<sup>10</sup>** contained fluorofentanyl and medetomidine

**Not sure what some of these substances are? View our drug dictionary: [www.drugchecking.community/drug-dictionary/](http://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 |** 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.

**3 | 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).

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

**5 | Results meeting service user expectations:** We consider results for a sample having met service user expectations if the only drug found in a sample was the drug that sample was got or bought as. For example, if a sample was expected to be (i.e., got or bought as) fentanyl and only fentanyl was found, or the only substances found were fentanyl and mannitol (a non-drug filler), we consider that sample having met expectations. If the expected drug was not found or, more commonly, the expected drug was found in combination with other drug(s) the service user did not expect, we would consider results not having met service user expectations. For example, if a sample was expected to be fentanyl and fentanyl was not found or, more commonly, fentanyl was found with caffeine and bromazolam (i.e., other drugs the service user didn't expect), we consider that sample not having met expectations.

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

**7 | 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](#).

**8 | 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](#).

**9 | 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](#).

**10 | 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.

**11 | 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.

**12 | 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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**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 opioid supply crisis and long before.

We acknowledge that racialized communities and survivors of colonization are disproportionately impacted by the toxic opioid 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 it means to provide care and reduce harm. We acknowledge that almost all of our samples have been collected by supervised consumption sites. We acknowledge the collection sites lost by our program due to the closure of their supervised consumption service.

**Contact us:** A small central team operates from within the Drug Checking Unit at MAP Centre for Urban Health Solutions, Unity Health Toronto. **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](http://www.drugchecking.community) | (email) [hello@drugchecking.community](mailto:hello@drugchecking.community) | (IG) [@drugchecking](https://www.instagram.com/drugchecking)