Monitoring and responding to the unregulated drug supply

Surveillance et intervention face à l'approvisionnement en drogues non réglementé

April 8, 2025 / 8 avril 2025





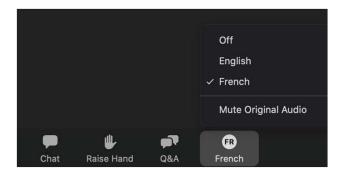


Interpretation / Interprétation

English-French simultaneous interpretation is available during the webinar.

Attendees should choose their preferred language from the **Interpretation** tab at the bottom of the screen.

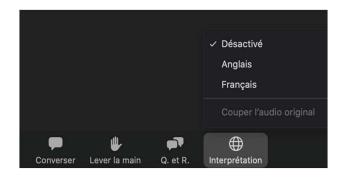




Durant le webinaire, des services d'interprétation simultanée anglais-français sont disponibles.

Les participant·e·s au webinaire devront opter pour la langue de leur choix à partir de l'onglet **Interprétation** au bas de l'écran.





Agenda

- i. Welcome and context setting (10 minutes)
- ii. Panelist presentations (20 minutes)
- iii. Panelist perspectives (15 minutes)
- iv. Panel discussion (30 minutes)
- v. Q&A, closing (15 minutes)

Ordre du jour

- i. Mot de bienvenue et mise en contexte(10 minutes)
- ii. Présentations par les panélistes(20 minutes)
- iii. Perspectives des panélistes (15 minutes)
- iv. Table ronde (30 minutes)
- v. Séance de questions et réponses, et mot
 de la fin (15 minutes)





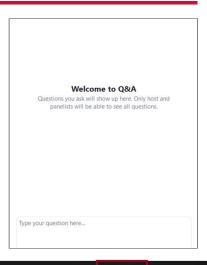
Panelists / Panélistes

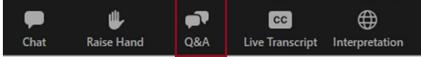
- Samantha King, CCSA / CCDUS
- **Karen McDonald,** Toronto's Drug Checking Service and Ontario's Drug Checking Community / service d'analyse de substances de Toronto et secteur de l'analyse de substances en Ontario
- Alyssa Miller, Streetworks
- Amber Streukens, ANKORS, Professionals for Ethical Engagement of Peers (PEEP)
- **Kim Corace,** CCSA / CCDUS





Q&A / Q. et R.





All attendees will be muted during the webinar.

Submit your questions in English or French through the **Q&A** tab at the bottom of the screen (not the Chat tab).





Tou·te·s les participant·e·s resteront en sourdine durant le webinaire.

Posez vos questions en français ou en anglais par l'intermédiaire de l'onglet **Q. et R.** au bas de l'écran (non celui de Converser).

What makes Canada's illegal drug supply dangerous?

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CATIE

https://www.catie.ca/prevention-infocus/what-makes-canadas-illegal-drugsupply-dangerous



Qu'est-ce qui rend l'approvisionnement en drogues illicites dangereux au Canada?

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Prohibition /

L'interdiction



Illegal drug markets /

Marchés illicites des drogues



Unregulated /

Non réglementé



No rules to ensure products are safe /

Aucune règle ne permet de s'assurer que les produits sont sans danger





Changes in the illegal drug supply / Évolution de l'approvisionnement en drogues illicites

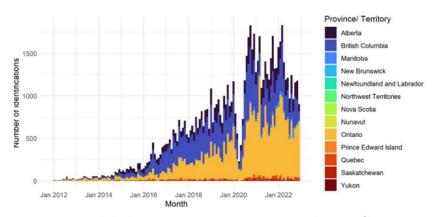


Figure 1. Fentanyl identifications across time, per province or territory (2012-2022)*

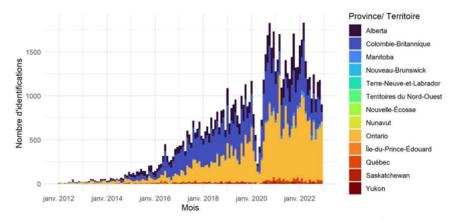


Figure 1. Identifications de fentanyl au fil du temps, par province ou territoire (2012-2022)







Changes in the illegal drug supply / Évolution de l'approvisionnement en drogues illicites



Maximizing profits / La maximisation des profits



Filling market demand / La satisfaction de la demande



Poor international control of precursor chemicals / Le contrôle des produits chimiques précurseurs laisse à désirer au niveau international



Role of the Internet / Le rôle d'Internet



COVID-19 pandemic and border closures / Pandémie de COVID-19 et les fermetures de frontières







What makes the illegal drug supply dangerous? / Qu'est-ce qui rend l'approvisionnement en drogues illicites dangereux?



Strength of drugs = unknown and unpredictable / Puissance des drogues = inconnue et imprévisible



Contents of drugs = unknown and unpredictable / Composition des drogues = inconnue et imprévisible





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Results from the Community Urinalysis and Self-Report Project (CUSP)

CATIE Webinar presented in partnership with CCSA Samantha King

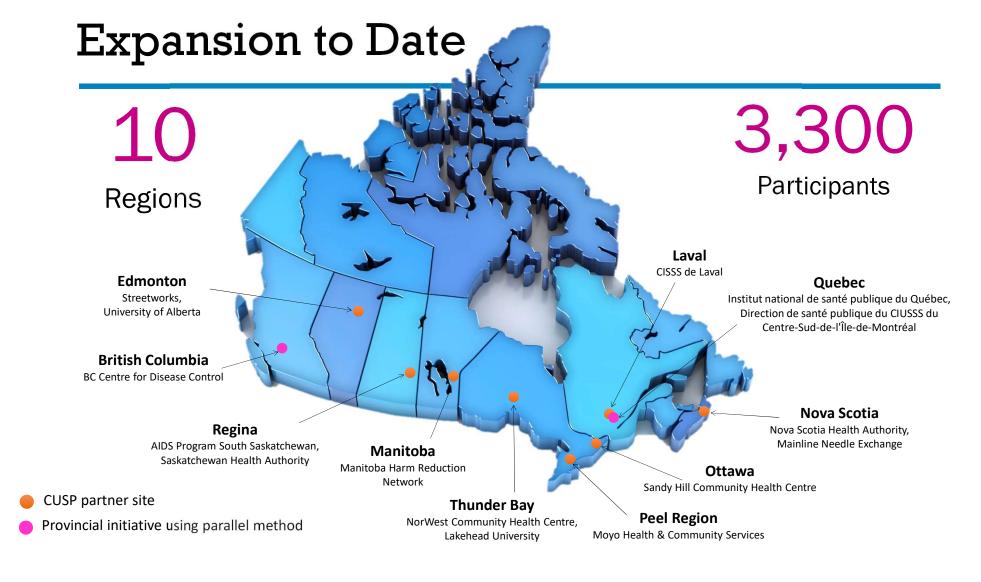
April 8, 2025

About CUSP

- Sentinel surveillance of expected versus actual use of drugs from the unregulated supply
- Fill gaps in knowledge:
 - Which substances from the unregulated supply are being used?
 - Do substances contain what people think they contain?
 - Is co-use of opioids and stimulants intended?
 - How do trends vary across Canada?



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Approach



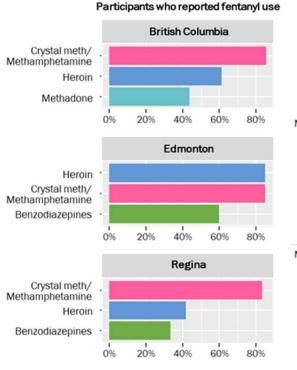
- "Project in a box": partner sites implement via a standardized project toolkit
- CCSA provides national-level co-ordination and support

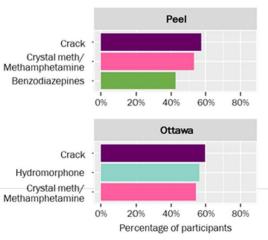
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Key Findings 2021-2023

Intentional Co-use of Substances





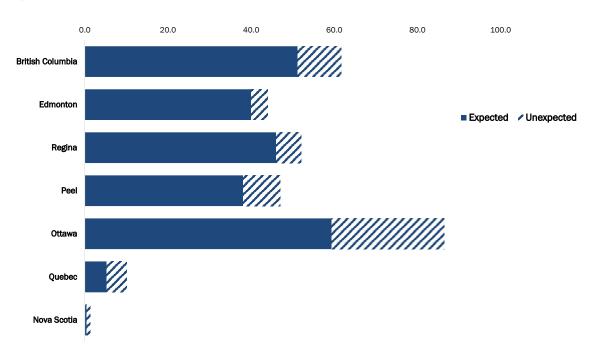
- 50-80% also reported use of a stimulant
- 33-60% also reported use of benzodiazepines

17

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Fentanyl Use, and Whether Expected, Varied Greatly Across Regions

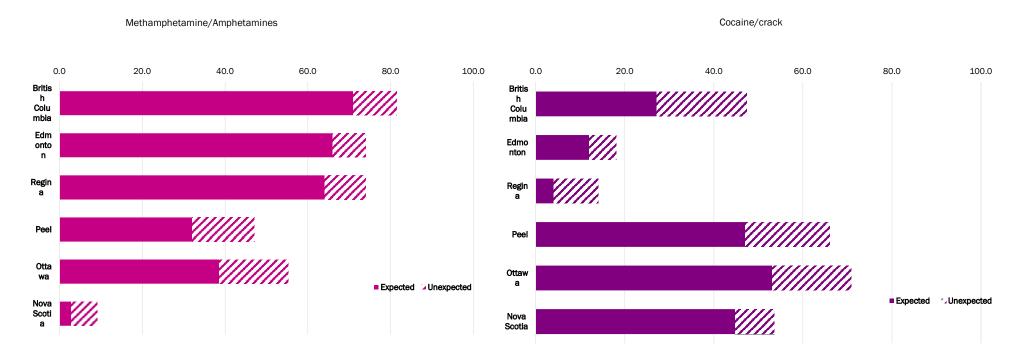
Percentage of participants who had fentanyl detected in urine, by expectation



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Stimulant Use Was Most Common

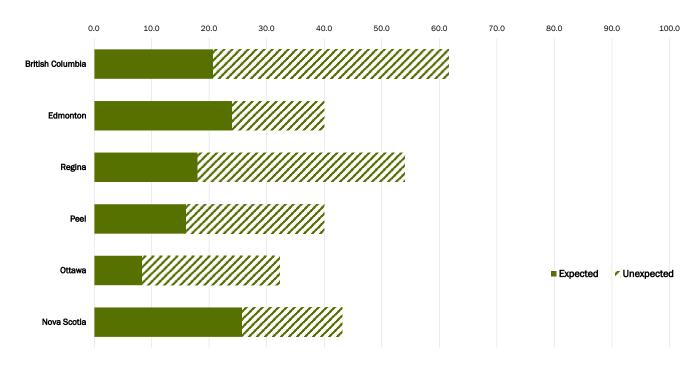
Percentage of participants who had stimulants detected in their urine, by expectation



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Benzodiazepine Use Was Often Unexpected

Percentage of participants who had benzodiazepines detected in their urine, by expectation

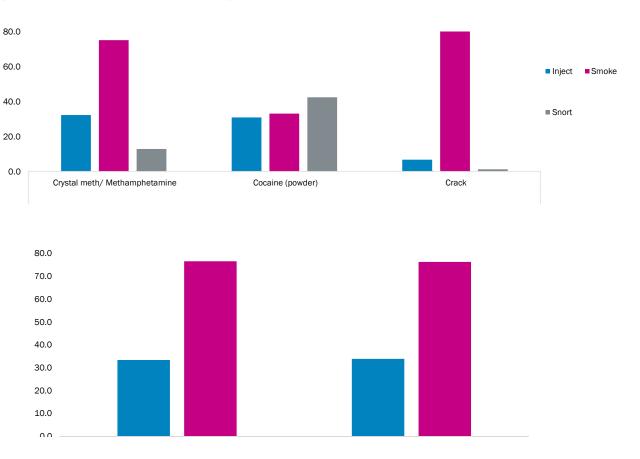


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20

Stimulants and Opioids Are Often Smoked

Percentage of participants reporting use of substance by route of administration



Questions and Comments

Additional Resources



Canadian Community Epidemiology Network on Drug Use

Substance Use Trends in Canada



Evidence. Engagement. Impact.

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September 18, 2024

Evidence Brief



Drug Checking¹

What Drug Checking Is

Drug checking is a service that tests dr This is important because unlike produ



Contact Information

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Ottawa, ON K1P 5E7

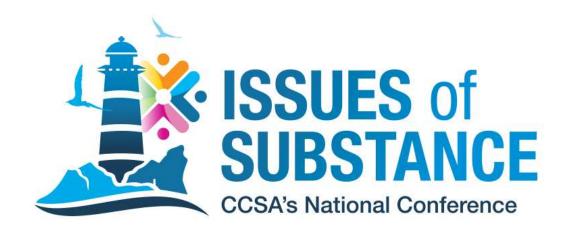
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CCSA's Issues of Substance 2025



November 17–19, 2025 Halifax Convention Centre

IssuesOfSubstance.ca



Monitoring and responding to the unregulated drug supply

A webinar presented by CATIE and the Canadian Centre on Substance Use and Addiction (CCSA)

April 8, 2025

Karen McDonald

Executive Director | Toronto's Drug Checking Service and Ontario's Drug Checking Community

Director, Program Development and Operations | St. Michael's Hospital, a site of Unity Health Toronto

kn.mcdonald@utoronto.ca

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 the land on which we operate in Toronto is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples, and is now home to many diverse First Nations, Inuit, and Métis peoples.

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

We acknowledge that 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 <u>community-led</u> drug market monitoring and education.



Ontario's Drug Checking Community is a national leader in community-led drug checking service delivery and unregulated drug market monitoring and education.

It involves scaling the offsite drug checking model designed and in use by <u>Toronto's Drug Checking Service</u> since 2019 to other jurisdictions in the province. The primary reason for doing so is to inform evidence-based responses to the worsening toxic drug supply crisis by educating people who use drugs, community health workers, public health units, clinicians, first responders, policy makers, public servants, forensic science and toxicology laboratories, coroners, researchers, and others about what's circulating in the unregulated drug supply and anticipated harms.

Having checked over 17,000 samples using gold standard technologies for chemical analysis that are validated for overdose prevention drug checking and publicly disseminated hundreds of drug market monitoring and drug education reports, the program has received international recognition and is a national authority on Canada's unregulated drug supply.

What we do

1

Drug checking service delivery

2

Community-led unregulated drug market monitoring and education

3

Community building

Who we are

Collection sites: Community agencies exempted to collect drug checking samples and share drug checking results, as part of the services they offer to people who use drugs.

Analysis sites: Clinical, research, or government laboratories exempted to analyze samples and report drug checking results.

The central operating team: Responsible for the overall design, management, and sustainability of the program, as well as conducting and publicly disseminating unregulated drug market monitoring and drug education and community building.





Benefits:

- Can analyze raw substances and used drug equipment
- Highly sensitive (can detect drugs in very trace amounts)
- Can break apart the most complex drug mixtures
- Can differentiate between drugs that are chemically similar
- Comprehensive libraries to detect rare and "new" drugs
- Able to provide precise quantification information

Limitations:

- Not portable
- Destroys the sample
- Turnaround time for results (within days from arrival at an analysis site – which is very short for this type of analysis)
- Current techniques cannot detect non-drug fillers
- Expensive and requires extensive training to operate

What we're finding



Checked samples by expected drug

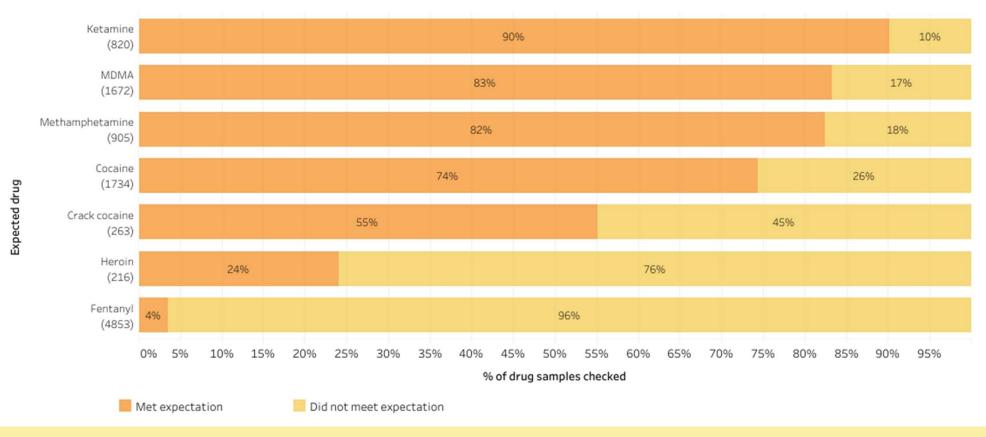
17,239 samples checked | Toronto's Drug Checking Service | Oct10/19 – Mar31/25



Ontario's Drug Checking Community | www.drugchecking.community

Frequency service user expectations are met

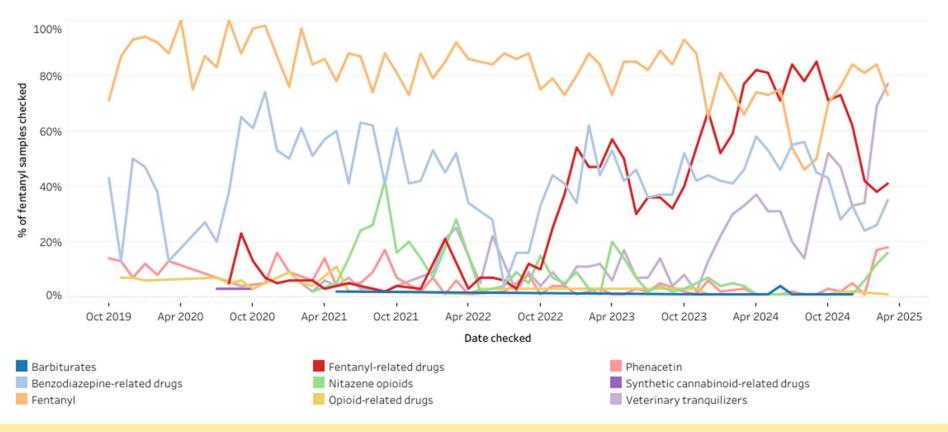
Toronto's Drug Checking Service | Oct10/19 – Mar31/25



Ontario's Drug Checking Community | www.drugchecking.community

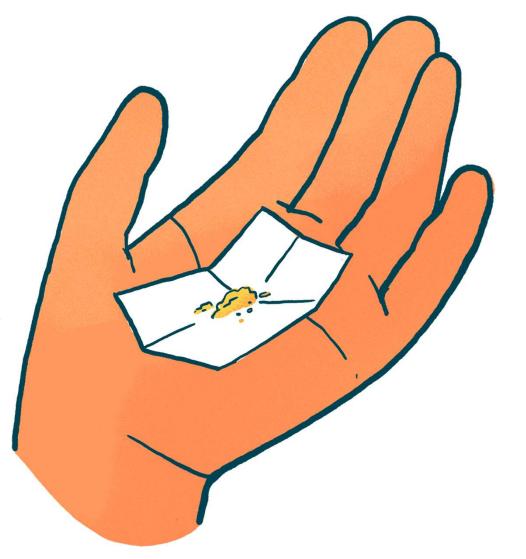
Noteworthy drug groups found in expected fentanyl samples

Toronto's Drug Checking Service | Oct10/19 – Mar31/25



Ontario's Drug Checking Community | www.drugchecking.community

Dissemination and use of our findings



Toronto's Drug Checking Service



Graphs About Drug Dictionary Drug Information Reports Resources Tips & Help

What's in Toronto's drug supply?

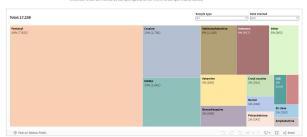
Every other week, results from samples checked by Toronto's Drug Checking Service are combined and presented using the graphs below. Sign.up to be notified when new data is available.

Checked samples by sample type



Checked samples by expected drug

When a sample is submitted to be checked, the drug that a sample was bought or got as is recorded (and is known as the "expected drug"). This graph shows which drugs were expected for samples checked. It can be filtered by sample type and the month a sample was checked.



Grouped noteworthy drug trends in expected fentanyl samples



Individual noteworthy drug trends in expected fentanyl samples

Interactive graphs

www.drugchecking.community

Number of high-potency opioids in expected fentanyl samples

Ontario's Drug Checking Community

v1

Unregulated fentanyl supply trends: Kingston, Ontario

March 2025

The Integrated Care Hub and its service users bring comprehensive, timely, and accessible unregulated drug market monitoring to Kingston by participating in Ontario's Drug Checking Community as a collection site member.

Ontario's Drug Checking Community is a national leader in community-led drug checking service delivery and unregulated drug market monitoring and education. Comprised of a group of members, the program involves implementing the offsite drug checking model designed and in use by Toronto's Drug Checking Service since 2019 in other jurisdictions across the province. The primary reason for doing so is to inform evidence-based responses to the worsening toxic drug supply crisis by educating people who use drugs, community health workers, public health units, clinicians, first responders, policy makers, public servants, forensic science and toxicology laboratories, coroners, researchers, and others about what's circulating in the unregulated drug supply and anticipated harms.

In March 2025, 30 samples¹ were collected from people who use drugs by the Integrated Care Hub and analyzed by analysis site members of Ontario's Drug Checking Community using gold standard technologies that are validated for overdose prevention drug checking. Of these 30 samples¹, 26 were expected² to be fentanyl (81% of these were drug samples, 19% were used drug equipment).

Key findings³

- One of the expected² fentanyl samples¹ was known to be **associated with an overdose** it contained fentanyl-related drugs in combination with a benzodiazepine-related drug
- 46% of the expected² fentanyl samples¹ contained multiple high-potency opioids⁴, including fentanyl, fluorofentanyl, a methylfentanyl-related drug, and/or protodesnitazene. Using high-potency opioids3 in combination increases the risk of overdose and greater than normal doses of naloxone may be required to rouse individuals experiencing an overdose.
- 31% of the expected² fentanyl samples¹ contained a methylfentanyl-related drug (at this time, we believe ortho-methylfentanyl is circulating, which is considered to be as strong as fentanyl)
- 27% of the expected² fentanyl samples¹ contained fluorofentanyl (at this time, we believe parafluorofentanyl is circulating, which is considered to be as strong as fentanyl)

- 19% of the expected² fentanyl samples¹ **contained a "new" high-potency** initazene opiold, protodesnitazene (considered to be as strong as fentanyl). Protodesnitazene has been found in samples? collected in Kingston, Peterborough, and Toronto (the three regions participating in Ontario's Drug
- 27% of the expected² fentanyl samples² **did not contain fentanyl** many of these samples instead
- 73% of the expected fentanyl samples contained at least one other central nervous and/or respiratory system depressant, including veterinary tranquilizers and/or benzodiazepine-related drugs. Using highpotency opioids⁴ 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,
- 58% of the expected² fentanyl samples² contained a benzodiazepine-related drug, namely Son on the expected Tentality Samples withanted a vertablished in the Tomazolam desalkylgidazepam, flualprazolam, flubromazepam, nordiazepam, as well as a "new" benzodiazepine-related drug, <u>ethylbromazolam</u>. Ethylbromazolam has been found in samples 1
- o 42% of the expected² fentanyl samples¹ **contained a veterinary tranquilizer** 38% contained
- Other samples checked were expected² to methamphetamine (2), alprazolam (Xanax) (1), or did not have a stated expected? drug (1). Unexpected noteworthy druge fentanyl was detected in the one sample with an unknown expected² drug, though the composition of the sample represented that of expected²

Notes

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

1 | Samples: Includes both drugs and used drug equipment. Drugs could be a very small amount of powder, crystals, rocks, blotter, 1 | Samples: includes both drugs and used drug equipment. Drugs could be a very small amount of powder, crystals, rocks, blor 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

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 2 | Expected (arus): When a sample is submitted to be checked, the arust user sample was bought or got as is recorded the "expected drug". Knowing the expected drug helps us tailor our harm reduction advice. It also helps us understand the "expected drug". Knowing the expected drug helps us failor our harm reduction advice, it also helps us understand containination to drugs rather than combinations of drugs (e.g., fentanyl was found in a heroin sample rather than fentanyl and

3 | Our key findings for the specified time period are based on results from both drugs and used drug equipment. There are 3 | Unit key lindings for the specified time period are based on results from both drugs and used drug equipment. Then limitations associated with including results from used drug equipment samples in unregulated drug market monh specified time period. Drug equipment—like cookers—are often re-used. The mass spectrometry technologies we use **Specing time period.** Uring equipment — like cookers — are often re-used. The <u>mass spectrometry technologies we us</u> sensitive that very trace amounts of substances may be found. This means that when equipment is re-used, substances

Written reports

(Bi-weekly for Toronto sites, monthly for others)

Results from 206 samples checked by Toronto's Drug Checking Service

January 25 - February 7, 2025

Key findings

- 14% of the expected fentanyl samples were known to be associated with an overdose all of these samples contained at least one high-potency opioid (an opioid considered to be as strong as or stronger than fentanyl), some in combination with a benzodiazepine-related drug and/or veterinary tranquilizer
- 31% of the expected fentanyl samples contained multiple high-potency opioids, including fentanyl, fluorofentanyl, a methylfentanyl-related drug, and/or nitazene opioid etomethazene
- 42% of the expected fentanyl samples contained a veterinary tranquilizer 32% contained xylazine and 20% contained medetomidine
- . 32% of the expected fentanyl samples contained a methylfentanyl-related drug (at this time, we believe ortho-methylfentanyl is circulating, which is considered to be as strong as fentanyl)
- 16% of the expected fentanyl samples contained a benzodiazepine-related drug, namely, bromazolam, desalkylgidazepam, nordiazepam, and a "new" benzodiazepine-related drug we are in the process of naming
- . 14% of the expected fentanyl samples contained fluorofentanyl (at this time, we believe parafluorofentanyl is circulating, which is considered to be as strong as fentanyl)
- 10% of the expected fentanyl samples contained a "new" high-potency nitazene opioid, which we have determined is etomethazene (considered to be 2 times stronger than fentanyl)
- 14% of the expected fentanyl samples did not contain fentanyl many of these samples instead contained a methylfentanyl-related drug and/or a veterinary tranquilizer

್ಕಳು found in expected fentanyl drug samples: In 71 expected fentanyl drug samples: 1.7% was the average amount of fentanyl found In 5 expected fentanyl drug samples: 4.2% was the average amount of 1.2 - 3.5% was the range of fentanyl found in half of the drug samples fluorofentanyl found In 25 expected fentanyl drug samples: 2.0% was the average amount of 0.5 - 11.9% was the range of fluorofentanyl methylfentanyl-related drugs found found in half of the drug samples In 16 expected fentanyl drug samples: 0.4 – 4.7% was the range of methylfentanyl-0.3% was the average amount of related drugs found in half of the drug medetomidine found In 30 expected fentanyl drug samples: 1.0% Was the average amount of xylazine 0.2 - 0.6% was the range of medetomidine found in half of the drug samples In 6 expected fentanyl drug samples: 0.4 - 6.4% was the range of xylazine found 2.3% was the average amount of in half of the drug samples bromazolam found 1.8 – 2.9% was the range of bromazolam

found in half of the drug samples

View the full report

Toronto's Drug Checking Service is a free and anonymous community-based public health service that aims to Torontos Drug Checking Service is a free and anonymous community-based public health service that aims to detailed information on the contents of their drugs. Revand education individual service uses duce the harms associated with substance use and, specifically, to prevent overdose by offering people who use its for all samples are combined and analyzed to perform unregulated drug market monitoring, then translated rugs timely and detailed information on the contents of their drugs. Beyond educating individual service users, ublicly disseminated every other week to communicate unregulated drug market monitoring, then translated every drug education to ublicly disseminated every other yeek to communicate unregulated drug market monitoring, then translated who cannot directly access the service, as well as to inform care for people who use drugs advocacy. who cannot directly access the service, as well as to inform care for people who use drugs, advocacvers and other information about Toronto's unrequilated drug.

who cannot directly access the service, as well as to inform care for people who use drugs, advoid to receive reports and other information about Toronto's Unregulated dru





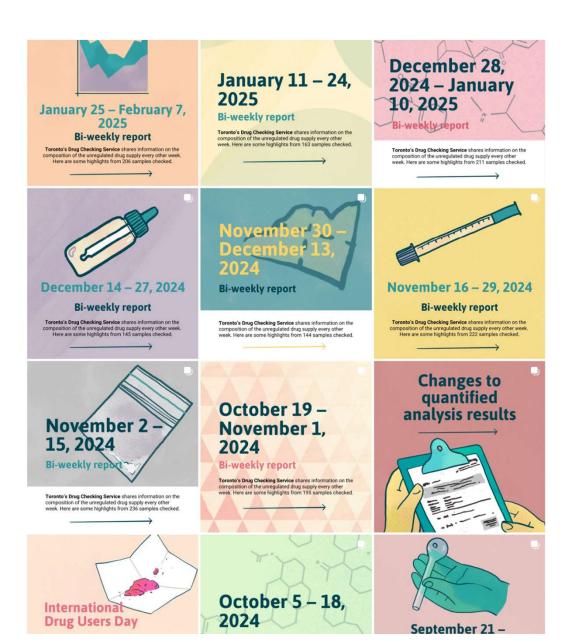




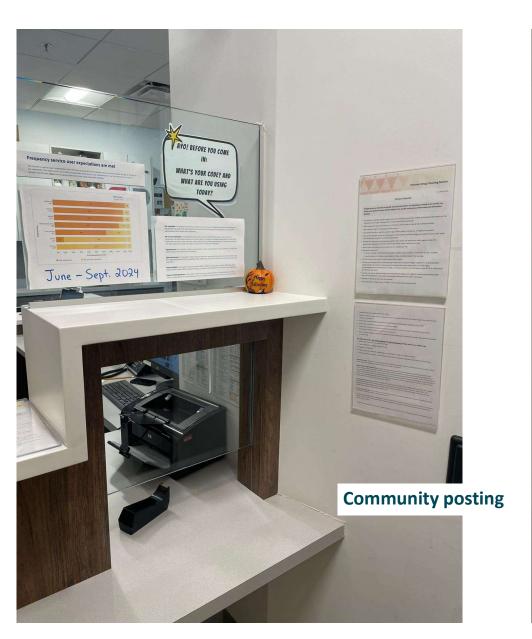


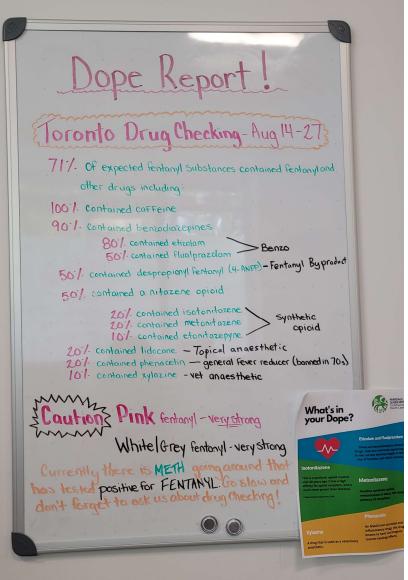
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Drug Alert: Increase in Drug-Related Deaths & Nitazene Opioids in Toronto's Unregulated Opioid Supply

March 18, 2024

Why are we sending this alert?

- There was an increase in suspected opioid overdose-related deaths attended by Toronto Paramedic Services between March 14-17, 2024.
 - During this period, preliminary data shows that there were 6 suspected opioid overdose-related deaths, which is triple the current average seen for a 4-day period in the past 12 weeks.

Additional Information

- There is no additional information available at this time about the specific drugs connected to these overdose related deaths.
- <u>Toronto's Drug Checking Service</u> recently identified <u>two</u> "new" high potency synthetic nitazene opioids in <u>Toronto's unregulated opioid supply</u>: <u>N-desethyl etonitazene</u> (10 times stronger than fentanyl) and <u>protonitazepyne</u> (20 times stronger than fentanyl) and observed an <u>increase in the presence of nitazene opioids in samples expected to be oxycodone</u> (OxyContin), hydromorphone (Dilaudid), hydrocodone, and Percocet.
 - Since nitazene opioids are potent, the risk of overdose is increased and greater than normal doses of naloxone may be required to rouse individuals experiencing an overdose.
 - The risk of overdose may be further increased for people who use oxycodone (OxyContin), Percocet, hydromorphone (Dilaudid), or hydrocodone, as compared to people who use fentanyl, because their opioid tolerance may be lower.
- · Overdoses are occurring throughout the city.

Messages for people using drugs in Toronto:

- . Try not to use alone. Buddy up with someone who you trust.
- Keep naloxone on-hand.
 - Kits are available at Toronto Public Health, The Works, and through many <u>partner organizations</u>. Free naloxone kits are also available at some pharmacies.
 Visit www.ontario.ca/page/get-naloxone-kits-free or call 1-800-565-8603.
 - Benzodiazepines in the unregulated drug supply may cause people to be sedated longer than usual. Following naloxone administration, some people may remain unconscious even after their breathing returns.
- Use a supervised consumption service, if possible. For locations and hours of sites please visit: toronto.ca/ConsumptionServices.
- . If you must use alone, have a safety plan.

Public health alerts



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Toronto

Surge in fatal suspected overdoses as potent synthetic opioids found in unregulated drug supply: TPH

 ${\bf 6}$ fatal suspected opioid overdoses recorded between March 14 and 17, public health says

CBC News · Posted: Mar 19, 2024 9:32 AM EDT | Last Updated: March 19



Toronto Public Health cautioned Monday that two powerful synthetic opioids were recently found in the city's unregulated drug supply. (Cole Burston/The Canadian Press)

Media

Health officials are warning of a surge in suspected overdose deaths in Toronto as two powerful synthetic opioids were recently found in the unregulated drug supply.

Toronto Public Health (TPH) said Monday that paramedics responded to six fatal suspected overdoses between March 14 and 17, about triple the average over four-day

The overdoses happened in various parts of the city, TPH said.

Toronto's Drug Checking Service, a free program funded by different levels of government, discovered the presence of two highly potent synthetic opioids, called nitazene opioids, in samples taken from the street supply of drugs. One of the nitazene opioids is about 10 times stronger than fentanyl, while the other is roughly 20 times more potent.

Drug marketing monitoring and education efforts by Ontario's Drug Checking Community are applied and strongly supported by many health and social service providers, such as:

- Ontario's public health units, who use the program's findings to educate their communities about trends in their local unregulated drug supply and how to reduce harm
- The <u>Registered Nurses' Association of Ontario</u>, <u>META:PHI</u>, and <u>Ontario Poison Centre</u>, who use the program's findings to inform care plans (including medication choices and doses), understand their patients' withdrawal symptoms and tolerance, engage their patients in more meaningful care, and tailor treatments
- The <u>Ontario Association of Chiefs of Police</u>, who use the program's findings to build better community relations and develop more effective strategies to handle drug-related incidents
- The Chief Coroner of Ontario, who uses the program's findings to contextualize trends in drug-related death investigations
- LifeLabs, who uses the program's findings to improve clinical care tools, such as urine drug screens

Thank you!

With general questions or comments, reach the program's central operating team at hello@drugchecking.community.

Interact with our data and access our resources at www.drugchecking.community and follow us on IG oddrugchecking.

Are you a community or public health agency in Ontario offering or interested in offering drug checking? Join Ontario's Drug Checking Community of Practice!

Questions?

Please enter any questions for our panelists into the question box.



Des questions?

Si vous avez des questions pour nos panélistes, veuillez les saisir dans la boîte à cet effet.





catie.ca

Thank you!

Please complete the webinar evaluation that will be provided following this webinar.

Merci!

Veuillez nous faire part de vos commentaires en répondant à l'évaluation qui vous sera envoyée après le webinaire.



