



Community Urinalysis and Self-Report Project: Methods Report for 2021–2023 Data

Acknowledgements

We sincerely thank the organizations and individuals involved in collecting, interpreting and sharing the data that informed this work. We extend our deepest appreciation to the harm reduction organizations and participants who devoted their time and efforts to this project amid the devastating drug poisoning crisis.

Background

About the Project

Community Urinalysis and Self-Report Project (CUSP) is implemented through a standardized project toolkit. Methods and materials were developed based on the work of the BC Centre for Disease Control (BCCDC), Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Île-de-Montréal, Streetworks and the University of Alberta. This methodology is implemented in provincial-level initiatives in British Columbia and Quebec (BCCDC, 2023; Institut national de santé publique du Québec, 2023a) and by partner sites participating in CUSP, which is centrally coordinated by Canadian Centre on Substance Use and Addiction.

Project toolkit materials are available [upon email request](#) to those interested in implementing CUSP in their region.

Harms caused by Canada's unregulated drug supply remain high in the postpandemic period (Federal, provincial, and territorial Special Advisory Committee on the Epidemic of Opioid Overdoses, 2023). These harms increasingly involve multiple substances such as opioids, stimulants and benzodiazepines (British Columbia Coroners Service, 2022; Gomes et al., 2023). However, it is difficult to determine which substances individuals expected to consume with available data sources. Understanding expected and actual substance use — and how this varies across communities in Canada — is necessary to inform harm reduction programs and policy. The Community Urinalysis and Self-Report Project (CUSP) was developed to fill this need for information (Biggar et al., 2021).



This document is intended to accompany CUSP reports that present from data collected between 2021 and 2023 (Canadian Centre on Substance Use and Addiction [CCSA], 2024a; 2024b; 2024c; 2024d). Additional information is provided on the methods (including their strengths and limitations) associated with the results presented in these reports. Accordingly, this document is intended for those involved in research, surveillance, service delivery and policy making related to reducing harms of the unregulated drug supply.

Methods

For the full overview of the methodology, including the pilot phase and subsequent cross-Canada scale-up, please refer to previous publications (Biggar et al., 2021; Canadian Centre on Substance Use and Addiction [CCSA], 2022). Briefly, clients accessing harm reduction services were recruited by site staff to participate. Eligibility criteria included being older than the age of majority in their region, reporting use of an illegal drug in the past six months and providing verbal informed consent to participate. Participants completed a standardized survey (paper-based or online) about past-three-day substance use and provided a urine sample. Cash honorariums were provided for participation. All urine samples were analyzed with broad spectrum urine toxicology. This method uses liquid chromatography–mass spectrometry to detect a range of opioids, stimulants, benzodiazepines and other substances (LifeLabs, 2022). Survey and urinalysis results were linked via anonymous participant ID codes. Aggregate-level data on key indicators were sent to CCSA for cross-Canada analysis.¹ We used descriptive statistics to summarize results related to the following indicators:

- You can use the bullets and numbered bullets in the Paragraph group of the Home ribbon.
- Reported use of substance(s) in the past three days
- Had substance(s) detected in their urine
- Among participants who had a substance detected in their urine, whether use was expected (i.e., also reported use in the past three days) or unexpected (i.e., did not report use in the past three days)
- Among participants who reported use of a substance in the past three days, whether the substance was detected in their urine or not
- Reported using a substance in the past three days by different routes of administration

Results are presented in a series of research reports available on the [CUSP website](#).

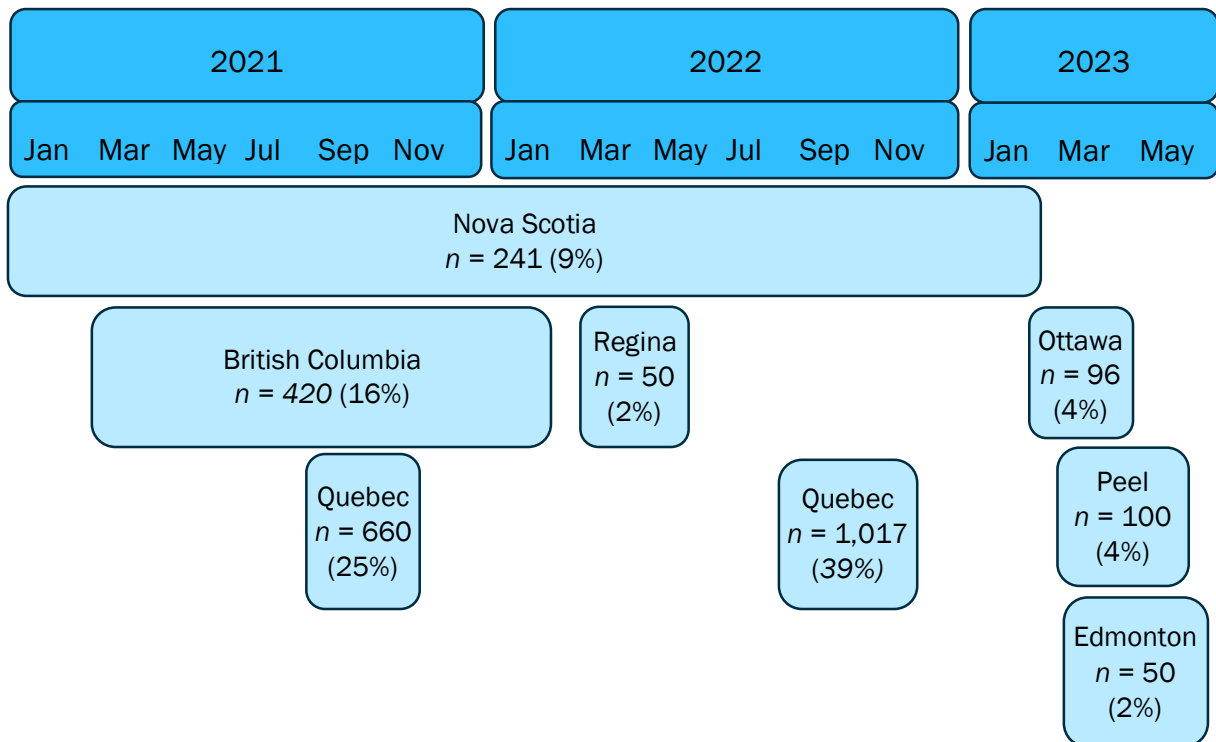
¹ In Quebec, individuals who reported using a substance in the past three days were eligible to participate. Data from Quebec were obtained from published reports (Institut national de santé publique du Québec, 2022; 2023b).



Results: Participant Characteristics

Between January 2021 and April 2023, data were collected from 2,634 participants recruited from harm reduction organizations in seven regions (refer to Figure 1).

Figure 1. Timeline of data collection and number of participants by region (percentage of total sample)



Most participants identified as men (percentage for each region ranged from 50 per cent to 78 per cent). A smaller percentage identified as women (19 per cent to 48 per cent) or a gender minority (0 per cent to 4 per cent), which includes transgender men, transgender women, nonbinary or gender-nonconforming individuals, Two-Spirit individuals, or individuals who identify with another gender identity. Most participants were ages 35–44 years (27.4 per cent to 45 per cent), 25–34 years (16 per cent to 30.7 per cent) or 45–54 years (17 per cent to 27.1 per cent).

All other results are presented in a series of research reports available on the [CUSP website](#).

Discussion and Conclusion

This study aims to fill a gap in knowledge related to expected and actual use of drugs from the unregulated drug supply in Canada. This information can be used at local, provincial and national levels to inform initiatives that reduce harms from the unregulated drug supply.



Additional information about CUSP is available on the [project website](#). For information about provincial-level initiatives that use the same methodology as CUSP, refer to:

- British Columbia: [BC Harm Reduction Client Survey](#)
- Quebec: [Projet suprarégional d'analyse de drogues dans l'urine de personnes qui consomment au Québec](#)

Limitations associated with this methodology relate to the data collection period, constraints of the urine toxicology method, and the continuously evolving unregulated drug supply. The data collection period spanned over two years due to differences in the timing of implementation in each region and COVID-19 related delays. Results should be interpreted as a snapshot of the local unregulated drug supply, which evolves rapidly. Contaminants like nitazenes and xylazine (whose use is typically unexpected) continue to emerge in the drug supply (Canadian Community Epidemiology Network on Drug Use [CCENDU], 2022a; 2022b; 2023). At the time of writing, these substances could not be detected by the urine toxicology used in most regions in this study. Results related to expected use should be interpreted in the context of the unpredictable, unregulated drug supply. Importantly, expected use does not entail reduced risk. In the absence of a predictable supply (e.g., of pharmaceutical-grade substances) or comprehensive drug checking services, it is rarely possible to know how much of a given substance is present and which other adulterants, contaminants or cutting agents may also be present. Other limitations of the methodology have been described in a previous report on data collected between 2019 and 2021 (CCSA, 2022).

References

- BC Centre for Disease Control (BCCDC). (2023). Harm reduction client survey. Vancouver, B.C.; Author. <http://www.bccdc.ca/health-professionals/data-reports/harm-reduction-client-survey>
- British Columbia Coroners Service. (2022). *Illicit drug toxicity deaths in BC*. https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/bccs_illicit_drug_mode_of_consumption_2016-2021.pdf
- Biggar, E., Papamihali, K., Leclerc, P., Hyshka, E., Graham, B., Taylor, M.,... Buxton, J. A. (2021). Towards cross-Canada monitoring of the unregulated street drug supply. *BMC Public Health*, 21(1), Article 1678. <https://doi.org/10.1186/s12889-021-11757-x>
- Canadian Centre on Substance Use and Addiction. (2022). *Community Urinalysis and Self-Report Project: Cross-Canada report on the use of drugs from the unregulated supply, 2019–2021 data*. Ottawa, Ont.: Author. <https://www.ccsa.ca/community-urinalysis-and-self-report-project-cross-canada-report-use-drugs-unregulated-supply-2019>



- Canadian Centre on Substance Use and Addiction. (2024a). *Community urinalysis and self-report project: Overall cross-Canada trends in substance use, 2021–2023*. Ottawa, Ont.: Author.
- Canadian Centre on Substance Use and Addiction. (2024b). *Community urinalysis and self-report project: Cross-Canada trends in stimulant use, 2021–2023*. Ottawa, Ont.: Author.
- Canadian Centre on Substance Use and Addiction. (2024c). *Community urinalysis and self-report project: Cross Canada Trends in benzodiazepine use from 2021–2023*. Ottawa, Ont.: Author.
- Canadian Centre on Substance Use and Addiction. (2024d). *Community urinalysis and self-report project: Cross-Canada Trends in opioid use, 2021–2023*. Ottawa, Ont.: Author.
- Canadian Community Epidemiology Network on Drug Use (CCENDU). (2021). *CCENDU Bulletin: Risks and harms associated with the nonmedical use of benzodiazepines in the unregulated drug supply in Canada*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. <https://www.ccsa.ca/risks-and-harms-associated-nonmedical-use-benzodiazepines-unregulated-drug-supply-canada-ccendu>
- Canadian Community Epidemiology Network on Drug Use (CCENDU). (2022a, March). *CCENDU Drug Alert: Nitazenes*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. <https://www.ccsa.ca/nitazenes-ccendu-drug-alert>
- Canadian Community Epidemiology Network on Drug Use (CCENDU). (2022b, July). *CCENDU Drug Alert: Xylazine*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. <https://www.ccsa.ca/xylazine-ccendu-drug-alert>
- Canadian Community Epidemiology Network on Drug Use (CCENDU). (2023, July). *CCENDU Bulletin: Update on Xylazine in Canada and the United States*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. <https://www.ccsa.ca/ccendu-bulletin-update-xylazine-canada-and-united-states>
- Federal, provincial, and territorial Special Advisory Committee on the Epidemic of Opioid Overdoses. (2023, December). *Opioid- and stimulant-related harms in Canada*. Ottawa, Ont.: Public Health Agency of Canada. <https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/>
- Gomes, T., Leece, P., Iacono, A., Yang, J., Kolla, G., Cheng, C., ...Wu, F. (2023). *Characteristics of substance-related toxicity deaths in Ontario: Stimulant, opioid, benzodiazepine, and alcohol-related deaths*. Toronto, ON: Ontario Drug Policy Research Network and Public Health Ontario. <https://odprn.ca/wp-content/uploads/2023/09/Substance-Toxicity-Report-Final.pdf>
- Institut national de santé publique du Québec. (2022). *Projet suprarégional d'analyse de drogues dans l'urine de personnes qui consomment au Québec – 2021*.



https://www.inspq.qc.ca/sites/default/files/documents/affiche_psaduq_2021_suprar_egional_v2.pdf

Institut national de santé publique du Québec. (2023a). Projet suprarégional d'analyse de drogues dans l'urine de personnes qui consomment au Québec.

<https://www.inspq.qc.ca/substances-psychoactives/projets/analyse-drogues-urine-personnes-qui-consomment>

Institut national de santé publique du Québec. (2023b). Projet suprarégional d'analyse de drogues dans l'urine de personnes qui consomment au Québec – 2022.

<https://www.inspq.qc.ca/sites/default/files/2023-08/R%C3%A9sum%C3%A9%20des%20r%C3%A9sultats%20suprar%C3%A9gionaux%20pour%20la%20collecte%202022.pdf>

LifeLabs (2022). Table 1. Urine broad spectrum tox screen (drug menu and reporting cut offs). <https://lifelabs.azureedge.net/lifelabs-wp-cdn/2024/01/LifeLabs-Broad-Spectrum-Tox-Menu.pdf>

About CCSA

CCSA was created by Parliament to provide national leadership to address substance use in Canada. A trusted counsel, we provide national guidance to decision makers by harnessing the power of research, curating knowledge and bringing together diverse perspectives.

CCSA activities and products are made possible through a financial contribution from Health Canada. The views of CCSA do not necessarily represent the views of Health Canada.

ISBN 978-1-77871-178-7

© Canadian Centre on Substance Use and Addiction 2024