National Safer Supply
Community of Practice

Prescribed Alternatives Programs in Ontario

April 2024

At a glance

Issue: Sustainable funding is needed to maintain and expand comprehensive prescribed alternatives programs.

Background:

- Opioid-related overdose deaths in Ontario continue to constitute a major public health crisis. 10,024 Ontarians died from accidental substance-related toxicity between 01/2018 and 06/2023.
- Prescribed alternative (PA) programs provide a harm reduction approach and comprehensive care to those who are at highest risk of harms from the unregulated drug supply and whose needs cannot be met by traditional OAT and RAAM models.
- There are currently 15 programs in Ontario that are funded by Health Canada's Substance Use and Addictions Program until March 2025 providing care to approximately 1500 people.
- Emerging evidence suggests that comprehensive PA programs are a critical approach on the continuum of substance use health services for addressing the drug toxicity crisis.

Evidence shows:

- Reductions in all-cause mortality and overdose mortality
- Reductions in overdose and use of unregulated opioids
- Decline in health care costs and fewer hospital visits
- Increased engagement in health care and social services
- Improvements in physical and mental health
- Improvements in social well-being and stability
- Reduced use of drugs from the unregulated street supply
- Improved control over drug use
- Reduced injection
- Reduced involvement in criminal activities
- Diversion of hydromorphone is not contributing to opioid-related mortality

National Safer Supply
Community of Practice

Issue:

Prescribed alternatives (PA; formerly referred to as 'safer supply') programs require committed funding support to expand their capacity and reach and to improve client and community outcomes.

Over 1500 clients are currently enrolled in 15 comprehensive PA programs across the province of Ontario (See Appendix 1). **This is a population whose substance use care needs have not been served by existing OAT or RAAM programs and would be at high risk of overdose death if programs were discontinued.** This population consists of people who have **highly complex health and social care needs that are now being addressed through primary care and wraparound supports** that are a central element of PA programs. (See Appendix 2: Profile of a PA Client).

Background:

Opioid-related overdose deaths in Ontario continue to constitute a major public health crisis. While opioid-related overdose rates have somewhat stabilized over the past year, these rates continue to be approximately 15% higher than pre-COVID rates from 2019. The extreme and continuing burden of opioid-related overdose in Ontario requires continued vigilance, intervention, and investment through a **spectrum of services** designed to meet the needs of a wide group of people at risk of overdose-related death.

Prescribed alternatives (PA) programs are one model of care on the spectrum of substance use health care services. PA programs provide care to individuals at high risk of overdose through the prescription of pharmaceutical opioids as an alternative to the fentanyl-adulterated drug supply and by providing wraparound care. The goal of PA is to reduce harms related to the toxic, unregulated drug supply. PA programs have been integrated into harm reduction programming in several Canadian jurisdictions.

In PA programs, the prescription of pharmaceutical opioids — generally daily-dispensed, immediate-release hydromorphone provided as take-home doses — is often paired with long-acting opioid medications (primarily slow-release oral morphine and, less frequently, methadone), as well as additional interventions to promote engagement with care and management of co-existing conditions.

Canada's first formal PA program began at the London InterCommunity Health Centre (LIHC) in 2016. Building on the work of LIHC, several organizations in Toronto and Ottawa started offering PA prescribing in 2019 and were funded through Health Canada's Substance Use and Addictions Program (SUAP) in 2020. Since then, a total of **15 programs** in Ontario, **reaching over 1500 people,** have been supported by SUAP funding that will end in March 2025**.**

The **emerging evidence suggests that prescribed alternatives programs have a critical role on the continuum of care for people who use drugs**. In particular, recent research (2) from Ontario found that clients enrolled in prescribed alternatives programs saw a significant decrease in emergency department visits, hospitalizations, and hospitalizations for infectious complications, resulting in significant cost savings for the healthcare system. Research (15) from BC shows risk mitigation (another term for safer supply/PA) opioid prescribing reduced death rates by two-thirds.

Common features of Ontario Pharmaceutical Alternatives Programs

- PA programs are primarily located in **community health settings** and delivered **by interdisciplinary primary care teams with wraparound support** (e.g., system navigation, peer support, care coordination, support to secure housing, food, income, mental health care, harm reduction supplies and education, social support, volunteer/employment/education opportunities)
- The most common medication prescribed is **hydromorphone tablet**s. Longer-acting opioids, such as **methadone or slow-release oral morphine (SROM**), are prescribed alongside prescribed alternative medications depending on patient needs.
- Patients who receive daily dispensed doses attend pharmacies each day to receive take-home doses of hydromorphone. Those who are also prescribed longer-acting opioids (e.g., SROM, methadone) receive these as observed doses at the pharmacy daily.
- PA programs have protocols to assess eligibility for take-home doses and to address suspected diversion (19, 20, 21).
- Published research (1) on Ontario PA programs shows that most clients enrolled in these programs have previously accessed other forms of addiction treatment (such as methadone and buprenorphine medications offered through opioid agonist treatment (OAT) and Rapid Access Addiction Medicine (RAAM) models, and that these medications have not been effective.
- Due to the high demand for programs, program eligibility is triaged to prioritize those who are experiencing **significant medical and social complications** related to their substance use. Programs frequently try to target people who are often the most **disconnected from care**, such as Black, Indigenous and people of colour, those who are precariously housed or unhoused, members of the 2SLGBTQ+ communities, and women and gender non-binary people.
- There is **significant community-level demand** for PA programs that is not being met by existing programs; expansion is limited by the constraints of current project funding structure.
- SUAP provides substantial resources for the evaluation of the funded prescribed alternatives projects to allow them to conduct **comprehensive program evaluations** and build the evidence base for prescribed alternatives. Additionally, over 20 national and provincial research studies are being conducted by academic scientists.

National Safer Supply
Community of Practice

Peer-reviewed scientific studies and evaluations

The emerging evidence provides strong signals that PA programs are a critical expansion to the existing services available to address the drug toxicity overdose crisis. Over 34 peer-reviewed scientific papers have been published on prescribed alternatives in the 2020-2024 period, illustrating the rapid growth in the evidence base on this intervention in the past 4 years. Of these, 18 examine outcomes, 14 address implementation, and 2 review the evidence. In addition to research studies, numerous peer-reviewed commentaries have been published. The grey literature contains 10 evaluation reports that provide findings for SUAP-funded projects, and a report from the British Columbia Office of the Provincial Health Officer that reviews BC Safer Supply programs and makes recommendations for future actions.

Key findings from research and evaluation studies show:

- **Decline in health care costs:** In the year after being prescribed Safer Supply, the healthcare costs of Safer Supply program clients dropped from $15,635 to $7,310 per person-year, with no corresponding change in costs observed in a matched group of individuals with substance use disorder who did not access the program (2). While medication costs increased among Safer Supply clients, only 15% of medication costs were for Safer Supply or Opioid Agonist Treatment medications, suggesting that clients were receiving broad treatment for conditions such as HIV and hepatitis C that will result in long term savings to the healthcare system.
- **Lower rate of death from any cause:** 61% decrease the week after at least 1 day of opioid prescription, and a 91% lower rate for those who received 4 or more days of opioid prescription (15).
- **Fewer hospital visits:** Safer Supply clients experienced significant decreases in emergency department (ED) visits, hospital admissions, and admissions for incident infections in the year following entry into the LIHC SOS program compared to the year prior. There was no significant change in these outcomes among a comparison group of London residents with opioid use disorder who were not clients of the safer supply program (2).
- **Reduced risk of overdose:** No overdose-related deaths were found in a study of London safer supply program clients that used Ontario health administrative data (2), which corresponds to other published research reporting fewer overdoses among Safer Supply clients (3,4,5,6,15). In BC, there was a 55% lower rate of death from overdose the week after at least 1 day of opioid prescription, and an 89% lower rate of death from overdose for those who received 4 or more days of opioid prescription (15).
- **Engagement and retention in programs and care:** Increased access to health and social services, including primary care, COVID-19 quarantine, OAT, counselling, and housing support; and improved relationships with providers (6,7,8.9,10).
- **Improvements in physical and mental health:** Improved chronic and/or infectious disease management, medication adherence, pain management, sleep, nutrition, and energy level (2,4,6,8,9,11,13).

- **Improvements in social well-being and stability:** Economic improvements (4,6,13) reduced inequities stemming from the intersection of drug use and social inequality (12), improved stability leading to engagement in employment, hobbies, and interests (4,9), decreased levels of involvement in criminal activities and legal issues, reduced exposure to violence, improved general social stability (3), improved housing access (4) and improved relationships with family members and friends (6,8,9).
- **Reduced use of drugs from the unregulated street supply:** Reducing overdose risk and, in some cases, reductions in overall drug use or cessation of the use of drugs by injection (3,4,5,8,6,13). 35% of all LIHC Safer Supply clients reported no longer using drugs by injection at all (8).
- **Improved control over drug use:** The flexibility and autonomy of Safer supply programs, coupled with certainty about dose strength, enabled participants to avoid withdrawal symptoms and manage pain (5,6,13).
- **Prescribed hydromorphone is not contributing to drug-related deaths:** Data from coroners in both BC and Ontario have found no link between prescribed hydromorphone and drug-related overdose deaths: “There is no indication that prescribed safe supply is contributing to illicit drug deaths” (22). In Ontario, despite the increasing use of immediate-release hydromorphone during the early pandemic period, both the percentage and overall number of hydromorphone-related deaths actually decreased (23), including in youth (17).

The future of prescribed alternatives programs

Project evaluations have demonstrated the promise of prescribed alternatives as one tool in the toolbox to support substance use health in the context of a toxic, unpredictable unregulated drug supply that is killing 22 Canadians a day. They have shown the importance of wraparound care to address social determinants of health and support stabilization, and the potential for primary care in community health organizations to provide comprehensive substance use health care that includes but is not limited to prescribed alternatives. Evaluations have highlighted the critical need to scale up access to PA programs to meet the community demand and to diversify medication options to include fentanyl products and formulations for injection and inhalation.

Threats to sustainability and expansion

Despite evidence demonstrating the promise of PA programs to address the substance use health and complex social and health needs of people who use drugs, programs are face threats to sustainability and expansion, arising from:

- **Lack of sustainable funding:** Federal funding through the Substance Use and Addiction Program expires March 2025 for all PA programs currently funded. Approximately 1500 patients will lose access to essential wraparound care, primary care, and substance use

health care unless sustainable funding is secured. RAAM and primary care are unable to absorb these patients and unable to provide the comprehensive and intensive care that they require. In addition to sustaining programs, programs must be scaled up to meet individual and community needs:
    - Programs need to expand capacity to meet demand for care.
    - Models require innovation to meet the unique needs of specific populations, e.g., Indigenous communities, youth, members of the African, Caribbean and Black communities, and rural and remote communities.
    - A greater diversity of medications is needed, including the availability of fentanyl products and formulations for injection and smoking. These are not currently listed on the Ontario Drug Benefit Formulary.

- **Lack of political support:** The current Ontario Minister of Health and Minister of Mental Health and Addictions have not been supportive of pharmaceutical alternative programs or harm reduction more broadly. The federal Conservative Party has indicated the intention to shut down pharmaceutical alternative programs. However, the Office of Chief Medical Officer of Health of Ontario released a report (16) in April 2024 stating support for safer supply (PA) and harm reduction.

- **Concern about potential unintended consequences:** There is concern about possible unintentional community harms associated with diverted medications from programs. Programs have extensive protocols to reduce diversion and address suspected diversion. Coroner's data does not indicate that diverted hydromorphone is contributing to opioid toxicity deaths. Research is underway to understand the scope of diversion and its impact.

Sources cited:

1. Young S, Kolla G, McCormack D, Campbell T, Leece P, Strike C, Srivastava A, Antoniou T, Bayoumi A, Gomes T. (2022) Characterizing safer supply prescribing of immediate release hydromorphone for individuals with opioid use disorder across Ontario, Canada. International Journal of Drug Policy, 2022; 102: 103601. https://doi.org/10.1016/j.drugpo.2022.103601.

2. Gomes, T., Kolla, G., McCormack, D., Sereda, A., Kitchen, S., and Antoniou, T. 2022. Clinical outcomes and health care costs among people entering a safer opioid supply program in Ontario. *Canadian Medical Association Journal, 194*(36), E1233-E1242. https://www.cmaj.ca/content/194/36/E1233.

3. L'Équipe de soutien clinique et organisationnel en dépendance et itinérance (ESCODI). 2022. *A First Survey on Safer Supply in Québec.* Québec: L'Équipe de soutien clinique et organisationnel en dépendance et itinérance.

4. Haines, M., Tefoglu, A., & O'Byrne, P. *Safer Supply Ottawa Evaluation: Fall 2022 Report*. (2022). Ottawa, Canada. https://safersupplyottawa.com/research/

5. McNeil, R., Fleming, T., Mayer, S., Barker, A., Mansoor, M., Betsos, A., Austin, T., Parusel, S., Ivsins, A., & Boyd, J. (2022). Implementation of Safe Supply Alternatives During Intersecting COVID-19 and Overdose Health Emergencies in British Columbia, Canada, 2021. *American Journal of Public Health 112*, s151-s158. https://doi.org/10.2105/AJPH.2021.306692

6. Selfridge, M., Heaslip, A., Nguyen, A., Card, K., & Fraser, C. (2020). *Cool Aid Community Health Centre Report on Risk Mitigation Guidance Prescriptions: Providing "Safer Supply" in CAMICO Sheltering Sites, Outreach and Primary Care Practice*. Victoria, British Columbia: Cool Aid Community Health Centre. https://coolaid.org/wp-content/uploads/2021/03/CACHC_RMG_March-August20…

7. Brothers, T.D., Leaman, M., Bonn, M., Lewer, D., Atkinson, J., Fraser, J., Gillis, A., Gniewek, M., Hawker, L., Hayman, H., Jorna, P., Martell, D., O'Donnell, T., Rivers-Bowerman, H., & Genge, L. (2022). Evaluation of an emergency safe supply drugs and managed alcohol program in COVID-19 isolation hotel shelters for people experiencing homelessness. *Drug and Alcohol Dependence 235,* Article 109440. https://doi.org/10.1016/j.drugalcdep.2022.109440

8. Kolla, G., Long, C., Perri, M., Bowra, A., & Penn, R. (2022). *Safer Opioid Supply Program: Summary Report*. London, Ontario: London InterCommunity Health Centre. https://www.nss-aps.ca/sites/default/files/resources/2022_LIHC_SOS_Prog…

9. McMurchy, D., & Palmer, R. W. H. (2022). *Assessment of the Implementation of Safer Supply Pilot Projects*. Ottawa, Ontario: Dale McMurchy Consulting. https://www.nss-aps.ca/sites/default/files/resources/2022-03-safer_supp…

10. Selfridge, M., Card, K., Kandler, T., Flanagan, E., Lerhe, E., Heaslip, A., Nguyen, A., Moher, M., Pauly, B., Urbanoski, K., & Fraser, C. (2022). Factors associated with 60-day adherence to "safer supply" opioids prescribed under British Columbia's interim clinical guidance for health care providers to support people who use drugs during COVID-19 and the ongoing overdose emergency. *International Journal of Drug Policy 105*, Article 103709. https://doi.org/10.1016/j.drugpo.2022.103709

11. Klaire, S., Sutherland, C., Kerr, T., & Kennedy, M. C. (2022). A low-barrier, flexible safe supply program to prevent deaths from overdose. *Canadian Medical Association Journal, 194*(19), e674-e676. https://doi.org/10.1503/cmaj.211515

12. Ivsins, A., Boyd, J., Beletsky, L., & McNeil, R. (2020a). Tackling the overdose crisis: The role of safe supply. *International Journal of Drug Policy 80*, Article 102769. https://doi.org/10.1016/j.drugpo.2020.102769

13. Ivsins, A., Boyd, J., Mayer, S., Collins, A., Sutherland, C., Kerr, T., & McNeil, R. (2020b). Barriers and facilitators to a novel low-barrier hydromorphone distribution program in Vancouver, Canada: a qualitative study. *Drug and Alcohol Dependence 216*: Article 108202. https://doi.org/10.1016/j.drugalcdep.2020.108202

14. Ranger, C., Hobbs, H., Cameron, F., Stuart, H., McCall, J. Sullivan, G., Urbanoski, K., Slaunwhite, A., & Pauly, B. (2021). *Co/Lab Practice Brief: Implementing the Victoria SAFER Initiative*. Victoria, British Columbia: Canadian Institute for Substance Use Research.

15. Slaunwhite, A., Min, J.E., Palis, H., Urbanoski, K., Pauly, B., Barker, B., Crabtree, A., Bach, P., Krebs, E., Dale, L., Meilleur, L., & Nosyk, B. (2024). Effect of Risk Mitigation Guidance opioid and stimulant dispensations on mortality and acute care visits during dual public health emergencies: retrospective cohort study. *British Medical Journal 2024*(384): e076336. https://doi.org/10.1136/bmj-2023-076336

16. Schmidt, R.A., Kaminski, N., Kryszajtys, D.T., Rudzinski, K., Perri, M., Guta, A., Benoit, A.C., Bayoumi, A.M., Challacombe, L., Hales, J., Kenny, K., Kolla, G., O'Reilly, E., Sereda, A., Rai, N., & Strike, C. (2023). 'I don't chase drugs as much anymore, and I'm not dead': Client reported outcomes associated with safer opioid supply programs in Ontario, Canada. *Drug and Alcohol Review 42*(7): 1825-1837. https://doi.org/10.1111/dar.13745

17. Iacono A, Kolla G, Yang J, Leece P, Moumita T, Wu F, Cheng C, Campbell T, Antoniou T, Juurlink D, Sheikh H, Emblem J, Kurdyak P, Bertrand J, Shearer D, Singh S, Gomes T, on

behalf of the Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2023). *Opioid toxicity and access to treatment among adolescents and young adults in Ontario*. Toronto, ON: Ontario Drug Policy Research Network. https://odprn.ca/research/publications/opioids-among-adolescents-and-yo…

18. Office of the Chief Medical Officer. (2024). *Balancing Act: An All of Society Approach to Substance Use and Harms*. 2023 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario. Retrieved 04/12/2024 from https://www.ontario.ca/files/2024-04/moh-cmoh-annual-report-2023-en-2024-04-02.pdf

19. Waraksa, M., et al. (2022). *Safer Opioid Supply Program Protocols.* Parkdale Queen West Community Health Centre. https://www.nss-aps.ca/sites/default/files/resources/2022-06-23-PQWCHC-Clinical-and-Operational-Protocols.pdf

20. Victoria SAFER Initiative. (2022). *Safer Supply Protocols*. AVI Health and Community Services. https://www.nss-aps.ca/sites/default/files/resources/2022-10-12-VictoriaSAFERInitiativeProtocols.pdf

21. Hales, J., Kolla, G., Man, T., O'Reilly, E., Rai, N., Sereda, A. (2020). *Safer Opioid Supply Programs (SOS): A Harm Reduction Informed Guiding Document for Primary Care Teams - April 2020 update.* https://bit.ly/3dR3b8m

22. British Columbia Coroners Service. (2023). *Unregulated Drug Deaths in B.C. (to April 30, 2023)*. https://www2.gov.bc.ca/gov/content/life-events/death/coroners-service/s…

23. Gomes, T., Murray R., Kolla, G., Leece, P., Bansai, S., Besharah, J., Cahill, T., Campbell, T., Fritz, A., Munro, C., Toner, L., & Watford, J. (2021). *Changing circumstances surrounding opioid-related deaths in Ontario during the COVID-19 pandemic*. Toronto: Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario and Ontario Agency for Health Protection and Promotion (Public Health Ontario). https://odprn.ca/research/publications/opioid-related-deaths-in-ontario…

Appendix 1: Ontario programs receiving funding from Health Canada's Substance Use and Addictions Program as of January 16th, 2023

Location	Organization(s)
London	London InterCommunity Health Centre - Funded: 2020 Evaluation Report
Toronto	Parkdale Queen West Community Health Centre - Funded: 2020 Evaluation Report
	South Riverdale Community Health Centre - Funded: 2020
	Inner City Family Health Team - Funded: 2023
	Sherburne Health Centre - Funded: 2023
	Toronto Public Health, The Works - Funded: 2021
Ottawa	Pathways to Recovery - Funded: 2020 Evaluation Report - Fall 2023; Spring 2023; Fall 2022
Kitchener - Waterloo	K-W Working Centre for the Unemployed (The Working Centre) - Funded: 2021 Evaluation Report and Model of Care
Guelph	Guelph Community Health Centre - Funded: 2021
Peterborough	Peterborough 360 Nurse Practitioner-Led Clinic- Funded: 2021
Thunder Bay	NorWest Community Health Centres - Funded: 2022
Brantford	Grand River Community Health Centre - Funded: 2022
St. Catherines	Regional Essential Access to Connected Health Care, Niagara - Funded: 2022
Hamilton	HAMSMaRT - Funded: 2022
	Hamilton Urban Core Community Health Centre - Funded: 2023

Appendix 2: Pharmaceutical alternatives program client profiles

- Ages (SSO: median = 40; 21-71)
- Gender (SS0: 66% men; 34% women; LIHC 53% women, 45% men, 2% trans person)
- Health complications related to substance use prior to starting on safer supply:
    - Hospital visits (SSO 87%)
    - ED in last 6 months: 77% (LIHC)
    - Hepatitis C (SSO 87%)
    - Skin infections (SSO 70%)
    - HIV (SSO 7%)
    - Endocarditis (SSO 3%)
- Rate their physical health to be poor or very poor: 55%
- Median age of starting to use opioids (SSO 22)
- Polysubstance use (alcohol, stimulants)
- Mental health concerns: LIHC - 59% rate their health to be poor or very poor
- Ethnicity (SSO: 71% white; 15% Indigenous, 12% other; 3% unknown; LIHC: 83% white, 23% Indigenous, 5% Black, Latinx, Middle Eastern, Asian, or mixed race)
- Education: (SSO: 53% didn't finish high school, 13% completed high school; 20% some college)
- Income insecurity - LIHC - 91% difficulty finding money to pay for basic needs
- Food insecurity LIHC 82%

Appendix 3: Peer-reviewed scientific studies of pharmaceutical alternatives

More than 36 peer-reviewed scientific papers have been published on Safer Supply in the 2020-2022 period, illustrating the rapid growth in the evidence base on this intervention in the past 2 years. Full bibliography is available on request, and select key papers include:

1) Slaunwhite, A., Min, JE., Palis, H., Urbanoski, K., Pauly, B., Barker, B., Crabtree, A., Bach, P., Krebs, E., Dale, L., Meilleur, L., Nosyk, B. (2024). Effect of Risk Mitigation Guidance for opioid and stimulant dispensations on mortality and acute care visits during dual public health emergencies: retrospective cohort study. *BMJ 384:e076336* https://doi.org/10.1136/bmj-2023-076336
   Key findings from this retrospective cohort study of 5882 people with opioid or stimulant disorder who received RMG prescriptions in British Columbia:
   - There was a 61% lower rate of death from any cause the week after at least one day of opioid prescription, and a 55% lower rate of death from overdose.
   - The effect increased with the number of prescription days; people who received four or more days of opioid prescription had a 91% lower rate of death from any cause and 89% lower rate of death from overdose.
   - Opioid prescription was not associated with acute care use. People prescribed stimulants used less acute care the following week. The effect of stimulant prescription on risk of death was unclear.

2) Gomes, T., Kolla, G., McCormack, D., Sereda, A., Kitchen, S., and Antoniou, T. (2022). Clinical outcomes and health care costs among people entering a safer opioid supply program in Ontario. *Canadian Medical Association Journal, 194*(36), E1233-E1242. https://www.cmaj.ca/content/194/36/E1233**.**
   Key findings from this research study of health outcomes among patients in London's safer supply program:
   - There was a rapid decrease in emergency department (ED) visits, hospital admissions, and healthcare costs (excluding primary care and medication costs) among individuals enrolled in the SOS program.
   - Among people in the SOS program, there was also a significant decrease in emergency department (ED) visits, hospital admissions, admissions for incident infections, and healthcare costs (excluding primary care and medication costs) in the year following entry into the program compared to the year prior.
   - No significant changes in these outcomes were found among a comparison group of London residents with opioid use disorder who were not clients of the SOS program.

3) Young, S., Kolla, G., McCormack, D., Campbell, T., Leece, P., Strike, C., Srivastava, A., Antoniou, T., Bayoumi, A., & Gomes, T. (2022). Characterizing safer supply prescribing of immediate release hydromorphone for individuals with opioid use disorder across Ontario,

Canada. *International Journal of Drug Policy, 102*(103601). https://doi.org/10.1016/j.drugpo.2022.103601
Key findings from this research study of patients receiving safer supply in Ontario and their prescribers:

- In Ontario, 447 individuals with opioid use disorder were started on safer supply of immediate release hydromorphone (IRH) between January 2016 and March 2020.
- A total of 155 prescribers started at least one individual on safer supply in this time period, with the most initiations occurring mid-2019. Prescribing IRH safer supply is substantially less common than prescribing traditional opioid agonist therapy.

4) McNeil, R., Fleming, T., Mayer, S., Barker, A., Mansoor, M., Betsos, A., Austin, T., Parusel, S., Ivsins, Al, and Boyd, J. (2022). Implementation of Safe Supply Alternatives During Intersecting COVID-19 and Overdose Health Emergencies in British Columbia, Canada, 2021. *American Journal of Public Health, 112*, S151-S158. https://doi.org/10.2105/AJPH.2021.306692
Key findings from this research study on the implementation of safer supply options at the beginning of the COVID019 pandemic in BC:

- Risk Mitigation Guidelines released in BC in March 2020 provided clinical guidance for and expanded access to safer supply for individuals relying on the illicit drug market.
- People who use drugs identified that reliable access to safer supply reduced both risk of overdose and involvement in criminal activities to generate income.

5) Glegg, S., McCrae, K., Kolla, G., Touesnard, N., Turnbull, J., Brothers, T.D., Brar, R., Sutherland, B., Le Foll, B., Sereda, A., Goyer, M-E., Rai, N., Bernstein, S., and Fairbairn, N. (2022). "COVID just kind of opened a can of whoop-ass": The rapid growth of safer supply prescribing during the pandemic documented through an environmental scan of addiction and harm reduction services in Canada. *International Journal of Drug Policy, 106*(103742). https://pubmed.ncbi.nlm.nih.gov/35679695/
Key findings from a national environmental scan of harm reduction services in Canada:

- The COVID-19 pandemic accelerated the establishment of injectable opioid agonist treatment and safer supply prescribing interventions across Canada.
- Sixty new safer supply sites were established between March 1 and May 1, 2020, representing 285% increase.

6) Urbanoski, K., Barker, B., Beck McGreevy, P., Slaunwhite, A., Pauly, B. (2022). The North American opioid crisis: evidence and nuance on prescribed safer supply. *The Lancet, 400*(10361), 1402-1403. https://doi.org/10.1016/S0140-6736(22)01592-6
Key findings include:

- Prescribed safe supply is meant for individuals at high risk of overdose to a toxic drug supply and evaluation of safer supply programs is ongoing.
- Addressing the current crisis requires multiple interventions, including safer supply, and listening to people who use drugs.

7) Brothers, T., Leaman, M., Bonn, M., Lewer, D., Atkinson, J., Fraser, J., Gillis, A., Gniewek, M., Hawker, L., Hayman, H., Jorna, P., Martell, D., O'Donnell, T., Rivers-Bowerman, H., Genge, L. (2022). Evaluation of an emergency safe supply drugs and managed alcohol program in COVID-19 isolation shelters for people experiencing homelessness. *Drug and Alcohol Dependence, 235*(109440). https://doi.org/10.1016/j.drugalcdep.2022.109440
Key findings from a rapid implementation of an emergency safe supply program at a COVID-19 isolation hotel in Halifax:
- Residents participating in the emergency safe supply program had high rates of completing the mandatory 14-day isolation stay.
- No overdoses occurred during the implementation of this program.

8) Ivsins, A., Boyd, J., Mayer, S., Collins, A., Sutherland, C., Kerr, T., McNeil, R. (2020). "It's helped me a lot, just like to stay alive": a Qualitative analysis of outcomes of a novel hydromorphone tablet distribution program in Vancouver, Canada. *Journal of Urban Health, 98,* 59-69. https://doi.org/10.1007/s11524-020-00489-9
Key findings from this research paper on safer supply program in Vancouver, BC:
- Safe supply program participants indicated that access to a reliable and regulated supply of opioids reduced use of toxic street-drug supply and reduced risk of overdose.
- Program further demonstrated positive outcomes for participants through improvements to health and well-being, the management of pain, and economic stability.

9) Ledlie, S., Garg, R., Cheng, C., Kolla, G., Antoniou, T., Bouck, Z., Gomes, T. (2024). Prescribed safer opioid supply: A scoping review of the evidence. *International Journal of Drug Policy, 125*, 104339. https://doi.org/10.1016/j.drugpo.2024.104339
Key findings from a scoping review of the evidence of peer-reviewed and grey literature published between January 1, 2012 to September 12, 2023:
- 24 papers were included that met criteria (client outcomes, client or provider perspectives)
- Findings included low rates of opioid toxicities, improved physical and mental health, and improved quality of life among clients.
- Findings also indicated a lack of access to adequate opioid doses and a limited range of opioid options. These were described by clients and providers as a potential reason for diversion and a barrier to program access.
- Evidence suggests that safer opioid supply programs are beneficial to clients through measurable outcomes, however further research is needed.

10) Gagnon, M., Rudzinski, K., Guta, A., Schmidt, RA., Kryszatys, DT., Kolla, G., Strike, C. 2023. Impact of safer supply programs on injection practices: client and provider experiences in Ontario, Canada. *Harm Reduction Journal 20*, 81. https://doi.org/10.1186/s12954-023-00817-7

Key findings from this qualitative study of 52 clients and 21 providers across four safer supply programs:

- Safer supply programs contribute to reducing injection-related health risks in addition to overdose risks.
- Three changes related to injection practices were identified: a reduction in the amount of fentanyl used and a decrease in injection frequency; the injection of hydromorphone tablets instead of fentanyl; and the cessation of injection altogether and taking safer supply medications orally.
- Safer supply programs have the potential to address disease prevention and health promotion gaps that stand-alone harm reduction interventions cannot address, by working upstream and providing a safer alternative to fentanyl.

Evaluations of Pharmaceutical Alternatives Programs

- Haines, M., Hill, E., Kerwin, S., Tefoglou, A., O'Byrne, P. (2023). *Safer Supply Ottawa Evaluation. Fall 2023 Report*. https://safersupplyottawa.com/wp-content/uploads/SS_Ottawa_Eval_Report_Fall_2023.pdf
- Perri, M., Fajber, K., Guta, A., Strike, C., and Kolla, G. (2023). *Outcomes from the Safer Supply Program in Kitchener-Waterloo.* https://www.substanceusehealth.ca/sites/default/files/resources/2023-KWSaferSupplyReport1.pdf Summary.
- Kolla, G. and Fajber, K. (2023). *LIHC Safer Opioid Supply Program Evaluation: A Comparison of SOS Client Outcomes from 2022 and 2023*. https://www.substanceusehealth.ca/sites/default/files/resources/2023-LIHC-SOS-Evaluation.pdf
- Haines, M., Tefoglou, & O'Byrne, P. (2023). *Safer Supply Ottawa Evaluation: Spring 2023*.
- Atkinson, K. (2023). *Safer Opioid Supply – 2023 Evaluation Report.* Parkdale Queen West Community Health Centre. https://pqwchc.org/wp-content/uploads/PQWCHC_SOS_EvaluationReport-Final-2023.pdf Infographic.
- Haines, M., Tefoglou, A., & O'Byrne, P. (2022). *Safer Supply Ottawa evaluation: Fall 2022 report*. https://safersupplyottawa.com/wp-content/uploads/SS-Ottawa-Evaluation-Report-Fall-2022.pdf
- McMurchy, D., & Palmer, R. W. H. (2022). *Assessment of the Implementation of Safer Supply Pilot Projects*. https://www.nss-aps.ca/sites/default/files/resources/2022-03-safer_supply_preliminary_assessment_report_en_0.pdf
- Kolla, G., Long, C., Perri, M., Bowra, A., and Penn, R. (2022). *Safer Opioid Supply Program: Summary Report. London: London Intercommunity Health Centre*. https://lihc.on.ca/wp-content/uploads/2022/01/2022-LIHC-SOS-Program-Summary-Report.pdf
- Ranger, C., Hobbs, H., Cameron, F., Sutart, H., McCall, J., Sullivan, G., Urbanoski, K., Slaunwhite, A. and Pauly. B. (2021). *Co/Lab Practice Brief: Implementing the Victoria SAFER Initiative.* Canadian Institute for Substance Use Research, University of Victoria,

Victoria, Canada.
https://www.uvic.ca/research/centres/cisur/assets/docs/colab/practice-brief-safer.pdf

Evidence Reviews (grey literature) and Government Reports

- British Columbia Office of the Provincial Health Officer. (2023). *A Review of Prescribed Safer Supply Programs Across British Columbia: Recommendations for Future Action*. British Columbia, Canada. https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/special-reports/a-review-of-prescribed-safer-supply-programs-across-bc.pdf
- National Safer Supply Community of Practice. (2022). *Prescribed Safer Supply Emerging Evidence*. https://www.nss-aps.ca/evidence-brief
- Public Health Ontario. (2022). *Scan of Evidence and Jurisdictional Approaches to Safer Supply.* https://www.publichealthontario.ca/-/media/Documents/S/2022/safer-supply-environmental-scan.pdf?rev=7c5662c193514367bd43ca2057a224df&sc_lang=en
- Ontario HIV Treatment Network. (2020). *Possible benefits of providing safer supply to people who use drugs during public health emergencies such as the COVID 19 pandemic.* https://www.ohtn.on.ca/rapid-response-possible-benefits-of-providing-safe-supply-of-substances-to-people-who-use-drugs-during-public-health-emergencies-such-as-the-covid-19-pandemic/

Pharmaceutical Alternatives FAQs and Infographics

- National Safer Supply Community of Practice. (2022). *Safer Supply for Health Care Providers: Frequently Asked Questions.* https://www.nss-aps.ca/safer-supply-prescribers-faq
- Victoria SAFER Initiative. (2022). *SAFER Impacts Infographic*. https://www.catie.ca/sites/default/files/2023-01/SAFER-Impacts-2022-infographic.pdf \
- Slaunwhite, A. et al. (2024). *Evidence Summary: Risk mitigation opioid prescribing reduced death rates by two-thirds.* https://www.advancinghealth.ubc.ca/wp-content/uploads/2024/01/RMG-BMJ-2024-evidence-summary_final_with-URL.pdf
- Atkinson, K. (2023). *Parkdale Queen West Community Health Centre Safer Opioid Supply Program Evaluation – Summary*. https://pqwchc.org/wp-content/uploads/PQWCHC_SOS_Infographic_Poster-Final-2023.pdf

Guidance and Protocols

- Waraksa, M., et al. (2022). *Safer Opioid Supply Program Protocols – Parkdale Queen West Community Health Centre*. https://www.nss-aps.ca/sites/default/files/resources/2022-06-23-PQWCHC-Clinical-and-Operational-Protocols.pdf

- Victoria SAFER Initiative. (2022). *Safer Supply Protocols.* AVI Health and Community Services. https://www.nss-aps.ca/sites/default/files/resources/2022-10-12-VictoriaSAFERInitiativeProtocols.pdf
- Hales, J., Kolla, G., Man, T., O'Reilly, E., Rai, N., Sereda, A. (2020). *Safer Opioid Supply Programs (SOS): A Harm Reduction Informed Guiding Document for Primary Care Teams - April 2020 update.* https://bit.ly/3dR3b8m