



# The need to prioritize research, policy, and practice to address the overdose epidemic in smaller settings in Canada

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## Abstract

The majority of research and policy directives targeting opioid use and overdose prevention are based in larger urban settings and not easily adaptable to smaller Canadian settings (i.e., small- to mid-sized cities and rural areas). We identify a variety of research and policy gaps in smaller settings, including limited access to supervised consumption services, safer supply and novel opioid agonist therapy programs, as well as housing-based services and supports. Additionally, we identify the need for novel strategies to improve healthcare access and health outcomes in a more equitable way for people who use drugs, including virtual opioid agonist therapy clinics, episodic overdose prevention services, and housing-based harm reduction programs that are better suited for smaller settings. These programs should be coupled with rigorous evaluation, in order to understand the unique factors that shape overdose risk, opioid use, and service uptake in smaller Canadian settings.

## Résumé

La recherche et les politiques d'orientation axées sur l'usage des opioïdes et la prévention des surdoses sont majoritairement basées dans les grandes agglomérations urbaines et ne sont donc pas faciles à adapter aux petites agglomérations du Canada (c.-à-d. aux villes petites et moyennes et aux agglomérations en milieu rural). Nous définissons plusieurs des lacunes de la recherche et des politiques dans les petites agglomérations, dont l'accès limité aux services de consommation supervisée, à l'approvisionnement sûr et aux nouveaux programmes de traitement par agonistes opioïdes, ainsi qu'aux services et aux mesures d'aide fondés sur le logement. Nous définissons aussi le besoin de stratégies novatrices pour améliorer l'accès aux soins de santé et les résultats cliniques de façon plus équitable pour les personnes qui font usage de drogue, notamment le besoin de cliniques virtuelles de traitement par agonistes opioïdes, de services épisodiques de prévention des surdoses et de programmes de réduction des méfaits fondés sur le logement, mieux adaptés aux petites agglomérations. De tels programmes devraient être assortis d'une évaluation rigoureuse pour mettre en lumière les facteurs particuliers qui influencent le risque de surdose, l'usage des opioïdes et le recours aux services dans les petites agglomérations canadiennes.

**Keywords** Research · Opioid overdose prevention · Opioid agonist therapy · Supervised consumption services · Smaller settings · Rural health

**Mots-clés** Recherche · prévention des surdoses d'opioïdes · traitement par agonistes opioïdes · services de consommation supervisée · petites agglomérations · santé en milieu rural

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## Introduction

The overdose epidemic remains a major public health challenge throughout Canada. In response, a variety of strategies have been implemented or scaled up, including low-barrier opioid agonist therapy (OAT) programs, naloxone distribution programs, and supervised consumption services (SCS). However, much of the research on these strategies, which has informed clinical practice and provincial public health directives, has focused on larger urban settings (e.g., Vancouver, Toronto). This can be problematic for smaller settings, as the implementation of novel policies and programs may not be easily adaptable to people who use drugs (PWUD), clinicians, and health services in these communities, and may require distinct approaches to implementation. Indeed, a growing body of research points to unique drug use patterns and practices, drug-related harms, and service access issues in these smaller settings (Parker et al. 2012; Russell et al. 2020; Casorso 2020; Mema et al. 2019) (Personal communication. British Columbia Coroners Service, and Tu, A., 2020). This commentary aims to highlight inequities in accessing SCS and novel harm reduction approaches to opioid use and overdose (e.g., injectable OAT, safer supply) in smaller settings. Furthermore, we propose a number of novel strategies for addressing opioid overdose in rural and remote settings, which should be rigorously evaluated to better inform our approach to the overdose emergency in smaller Canadian settings.

## Programming and geographic differences

SCS is a clear example of how applying lessons learned from opioid use in large cities to smaller settings can be problematic. A recent policy study in Ontario identified how, compared to larger cities, smaller communities with less capacity and resources were unable to meet provincial SCS policies, which included location restrictions, rigorous evaluations, ability to provide treatment services on-site, and routinely addressing community concerns (Russell et al. 2020). The majority of research on SCS in Canada is based in Vancouver's Downtown Eastside (Kerr et al. 2017), where there are large concentrations of PWUD as well as an abundance of health services in close geographic proximity. While the evidence is clear that SCS provides a variety of benefits, including access to sterile injection equipment, medically trained staff who can respond to overdoses, and referrals to other health and social services (Kerr et al. 2017), populations in smaller settings are often more dispersed and many communities lack various social services that are more widely available in larger cities (Casorso 2020). These factors, along with potential obstacles in garnering support from community stakeholders (e.g., police, politicians, neighbourhood associations) (Bardwell et al. 2017), create unique challenges for the geographical

placement of SCS within smaller Canadian settings. This is true of settings in BC, such as the Interior Health region, where mobile SCS have been implemented in the mid-sized cities of Kelowna and Kamloops as a result of community backlash against permanent fixed sites (Kerr et al. 2017). One study reported a variety of challenges to mobile SCS, including limited hours of operation, inadequate space to respond to overdoses, and an inability to have confidential conversations (Mema et al. 2019). However, aside from this study, there is no known research on the uptake of mobile SCS in Canadian settings, and little is known about how contextual factors in smaller settings affect service use. For communities that lack fixed sites, nurse- and/or peer-led episodic overdose prevention services provided in non-SCS health service environments (e.g., pharmacies, multi-unit housing) should be explored.

Similar challenges exist with regard to provision of harm reduction supplies. For example, a qualitative study on harm reduction access among non-urban PWUD in Atlantic Canada reported mobile service delivery challenges due to a small population dispersed across wide geographical regions, which led to infrequent points of care (Parker et al. 2012). Establishing fixed sites for harm reduction clinics in smaller settings was not only found to be unrealistic due to funding barriers, but these settings presented unique stigma and confidentiality issues (Parker et al. 2012). To increase accessibility of harm reduction supplies, public health authorities should explore mail-based delivery services, which currently exist in the United States for those who cannot access supplies (Yang et al. 2021).

## Distinct patterns of drug use

Data on drug use patterns and practices, including consumption methods, is another clear example of the problematics of having public health research from larger cities inform provincial policies and programming in ways that may impact service access for some PWUD in smaller settings. For example, preliminary data from the British Columbia (BC) Coroners Service indicates that approximately 23% of overdose deaths in the Interior Health region between 2016 and 2019 resulted from injecting drugs, whereas inhalation and intranasal consumption methods accounted for 39% and 31% respectively (Personal communication. British Columbia Coroners Service, and Tu, A., 2020). However, many overdose prevention policies and programs target those who inject drugs, which has the potential to alienate those most at risk of overdose death in other settings, especially since most SCS in BC and in Canada do not accommodate drug inhalation (Kerr et al. 2017). Additionally, a recent province-wide study found that individuals who prefer non-injection drug consumption methods were less likely to

possess naloxone (Moustaqim-Barrette et al. 2019), demonstrating another critical gap that needs to be addressed in smaller settings.

In addition, the majority of overdose deaths in BC occur in private residences (BC Coroners Service 2021), including in smaller settings (Casorso 2020), so it is vital to make overdose prevention strategies accessible to those who use drugs at home. While this is true across the province in all settings, rural and remote settings present unique challenges since populations can be more dispersed. Compared with public health interventions targeting large concentrations of PWUD living in close proximity (e.g., Vancouver’s Downtown Eastside), housing-based service delivery in smaller settings would undoubtedly be more onerous, particularly for PWUD who are more isolated, including those residing in single dwelling homes and those living outside of urban centres. The province has implemented a mobile phone overdose response application (Government of British Columbia, Ministry of Mental Health and Addictions 2020) that may benefit those who do not live in close proximity to harm reduction services, though no known research has examined the uptake of this strategy in these particular settings. Additionally, the remote city of Powell River, BC, is in the process of implementing a housing-based peer witness consumption program, where people with lived experience of drug use visit the homes of PWUD throughout the community to supervise drug use and respond in the event of an overdose. Aside from these strategies, transportation support and other housing-based programs should be explored to ensure more equitable access to health services.

### Limited access to injectable OAT and safer supply

There also remains a gap in both the research and policy directives for “safer supply” and novel OAT programs in smaller settings. Recent national guidelines for prescribing injectable OAT, for example, require clinical supervised consumption, sometimes multiple times per day (Fairbairn et al. 2019). Those who live in close proximity to pharmacies or clinics that dispense prescriptions may experience better access. However, distance and transportation have been identified as significant barriers to accessing health services among PWUD in remote and rural settings in BC (Casorso 2020). In addition, current safer supply models are largely clinic-based and rely on a clinician’s willingness to prescribe opioids. In smaller settings, with fewer clinicians in general, and even fewer clinicians with harm reduction and addictions medicine training, safer supply initiatives may not be possible. In the absence of community-led safer supply models,

smaller communities should explore virtual OAT and safer supply clinics. These would not only connect PWUD to the right clinicians but also address stigma and accessibility issues. Last, communities should explore pharmacist- or nurse-led OAT and safer supply home delivery services. These exist elsewhere (MacKinnon et al. 2020) and would provide PWUD with more equitable access to prescription opioids as well as ongoing points of care.

### Conclusion

We have shed light on various potential limitations of current overdose prevention policies and programs in Canada. It is clear that more attention needs to be paid to the challenging and unique experiences of clinicians and PWUD in smaller settings. Novel public health strategies, coupled with rigorous evaluations, are needed to ensure equitable access to programs in these communities. Throughout this commentary, we have recommended a variety of interventions that would more adequately address the opioid overdose epidemic in smaller settings. It is critical to involve PWUD in the development and delivery of these programs to ensure they meet the needs of the community (Canadian HIV/AIDS Legal Network 2006). In addition, community-engaged research and evaluation of these novel interventions are urgently needed, including qualitative and mixed methods research, in order to understand the contextual and implementation factors that shape overdose risk as well as the uptake of, and access to, a variety of programs and services aimed at preventing overdose and other drug-related harms and improving equitable healthcare access and health outcomes for PWUD in smaller settings across Canada.

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