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## Navigating post-eviction drug use amidst a changing drug supply: A spatially-oriented qualitative study of overlapping housing and overdose crises in Vancouver, Canada

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### Abstract

**Background:** North American cities are experiencing intersecting housing and overdose crises as illicit drug markets become marked by the proliferation of fentanyl and methamphetamine. Despite recent research documenting associations between evictions and drug-related risks and harms, including overdose, the mechanisms through which these occur remain poorly understood. This study examines how evictions shape the drug use practices of people who use drugs in Vancouver's Downtown Eastside – a neighbourhood with an established drug scene – as the illicit drug supply changed.

**Methods:** Qualitative interviews and geo-spatial data collection were conducted with 56 recently evicted PWUD. Data were analyzed by interfacing qualitative and geo-spatial data, and interpreted

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#### Contributors

RM oversaw study design and implementation, data collection and analysis, and led manuscript preparation. TF, ABC, SM, and JC assisted with data analysis, interpretation, and provided critical feedback on the manuscript. SC assisted with data collection and analysis. All contributing authors have approved the final version of this article except SC. SC was a valued member of our project team and wider community who died in December 2019. She is included as an author in acknowledgement of her many contributions.

#### Conflict of Interest

None declared.

#### Author Disclosures

None

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focusing on how structural vulnerability shaped spatial practices and drug-related risks post-eviction.

**Results:** Findings demonstrate how post-eviction spatial practices and routines produced risk and harm as participants navigated the uncertainties of housing vulnerability and drug supply changes. Post-eviction disruptions complicated participants' ability to engage with trusted drug sellers. Changes to spatial patterns and access to private spaces rendered public drug use inevitable, though this was mitigated to some degree by harm reduction supports. Abrupt changes to drug use patterns occurred due to post-eviction disruptions and included instrumental uses of methamphetamine to increase alertness and navigate survival amidst severe hardship.

**Conclusions:** Findings demonstrate how post-eviction changes to routines and spatial patterns are framed by structural vulnerability and can exacerbate drug-related harms, particularly in the context of a changing drug supply. There is an urgent need for structural interventions and harm reduction responses to mitigate harms associated with evictions.

### Keywords

Overdose; fentanyl; Methamphetamine; housing; qualitative research; community-based research

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## 1. INTRODUCTION

Illicit drug markets across North America have undergone a tectonic shift since the mid-2010s as illicitly-manufactured fentanyl and fentanyl-adulterated drugs (hereafter, fentanyl) have replaced heroin and prescription opioids (Althoff et al., 2020). More recently, methamphetamine has become more widely available across North America and become the dominant illicit stimulant in some regions (e.g., Western United States and Canada) (Bach et al., 2020; Jones et al., 2020) while cocaine and crack cocaine use has increased and remained dominant in other regions (e.g., Eastern United States) (Cano et al., 2020). These changes to illicit drug markets have led to new waves of, and intensified, North America's overdose crisis (Ciccarone, 2019). In 2018, fentanyl was implicated in the majority of opioid-related overdose deaths in the United States and Canada (Overdoses, 2020; Wilson et al., 2020). Meanwhile, an increasing proportion of North American overdose deaths have involved illicit stimulants, either alone or in combination with fentanyl and other drugs, since 2016 (Cano and Huang, 2020; Cano et al., 2020; Gladden et al., 2019; Nolan et al., 2019).

Even as the most recent waves of the overdose crisis are characterized by the reconfiguration of illicit drug markets (Ciccarone, 2019), they are further amplified by the confluence of social and structural inequities (Dasgupta et al., 2018; van Draanen et al., 2020). Subsequently, the overdose crisis has disproportionately affected the structurally vulnerable – that is, those rendered more vulnerable to suffering due to their marginal positions within social hierarchies stemming from the intersection of structural inequities (e.g., poverty, homelessness, drug criminalization) and discrimination (e.g., racism, sexism, classism) (McNeil et al., 2015b; Quesada et al., 2011). There is ample evidence demonstrating an association between overdose deaths and, for example, socio-economic marginalization (Dasgupta et al., 2018; van Draanen et al., 2020), including poverty and unemployment

(Altekruse et al., 2020; Frankenfeld and Leslie, 2019; Pear et al., 2019; Rudolph et al., 2020), and much attention has subsequently been paid to their role in the ‘deaths of despair’ that have lowered life expectancies among white populations (Case and Deaton, 2020). And yet, this distracts from the fact that overdose deaths have also surged among communities of color most impacted by the intersection of systemic racism with socio-economic marginalization and criminalization (Alexander et al., 2018; Lavalley et al., 2018; Lippold et al., 2019; Tsai et al., 2019). While epidemiological research has clarified who has been impacted by recent waves of the overdose crisis, there remains a need for social sciences research that unpacks how structural vulnerabilities are implicated in drug-related risks to provide a more complete basis for effective and socially just policy and programmatic interventions.

In cities across North America, changes to illicit drug markets have happened in lockstep with housing crises fueled by urban redevelopment and inadequate investments in affordable housing, resulting in housing vulnerability and homelessness among people who use drugs (PWUD). Housing vulnerability and homelessness are critical in shaping the structural vulnerability of urban drug-using populations and have long been demonstrated to be associated with drug-related risks and harms (Kerr et al., 2007; Lorvick et al., 2006; Riggs et al., 2020; Sherman et al., 2007; Yamamoto et al., 2019). Building on this body of research, recent epidemiological research undertaken in a setting with high rates of fentanyl use has further pointed to housing vulnerability and homelessness as a risk factor for overdose (Park et al., 2018). Yet, the mechanisms by which housing vulnerability and homelessness produce drug-related risks and harms, including within the context of ongoing changes to illicit drug markets, remain poorly understood as past research has primarily focused on housing status (e.g., homelessness) rather than examining how such mechanisms have reconfigured the daily lives of PWUD and their subsequent impacts on drug-related outcomes. Among these mechanisms, residential evictions warrant particular attention as an event common among PWUD due to housing pressures and inadequate tenancy protections (Fleming et al., 2019) and one that precipitates homelessness (Crane and Warnes, 2000; Desmond, 2012; Dickson-Gomez et al., 2008). Recent epidemiological studies have demonstrated independent associations between evictions and syringe-sharing (Pilarinos et al., 2017), initiation or re-initiation of methamphetamine (Damon et al., 2018), and overdose (Bradford and Bradford, 2020), underscoring the need to better understand how evictions shape drug-related outcomes. Further, growing awareness of the importance of experiences of space and place in shaping drug-related outcomes (Fast et al., 2009; McNeil et al., 2015a; McNeil et al., 2014a) points to the need for spatially-informed social sciences research that considers how such outcomes stem from changes to spatial practices. Here, spatial practices are understood as the ways in which people engage with space in their daily lives and how these engagements are shaped by the socio-spatial organization of communities (De Certeau, 1984).

Vancouver, Canada’s Downtown Eastside is the site of overlapping housing and overdose crises (Carnegie Community Action Project, 2019) and thus positioned to yield critical insights into how evictions produce drug-related risks. This approximately five-by-ten block inner-city neighbourhood is home to thousands of PWUD, comprehensive harm reduction infrastructure (e.g., syringe distribution, supervised injection sites), and the majority of the

city's low-income housing, primarily in the form of private and non-profit-operated single room occupancy hotels (SRO). SROs are characterized by abysmal living conditions (e.g., pest infestations, damages) (Bardwell et al., 2019b; Shannon et al., 2006) and gendered and racialized violence (Collins, Alexandra B. et al., 2018) and yet that have also served as crucial sites of community organizing (Nowell and Masuda, 2020). Over the past decade, housing pressures resulting from rapid gentrification (e.g., mixed-income developments, losses of low-income housing), together with inadequate tenancy protections and widespread unlawful practices by private landlords and non-profit housing operators, have caused evictions to become commonplace among PWUD in the neighbourhood (Fleming et al., 2019). Amidst widespread evictions and growing homelessness, the Downtown Eastside has become an epicenter of the overdose epidemic as fentanyl began to replace heroin and prescription opioids within the illicit drug supply beginning in 2015 (Karamouzian et al., 2018; Mayer et al., 2018). Meanwhile, methamphetamine use, including polysubstance use with fentanyl, has increased dramatically in recent years (Bach et al., 2020).

In this paper, we report findings from a community-based research study exploring the impacts of evictions on PWUD in the Downtown Eastside that was undertaken during this period of change within the illicit drug supply and spiking overdoses. Drawing on qualitative and geospatial methods, we were particularly concerned with how displacement shaped key drug use practices and patterns associated with vulnerability to fentanyl-related overdose, specifically drug sources, drug use locations, and drug use patterns.

## 2. METHODS

This community-based participatory research study involving a partnership with a drug user-led organization (Vancouver Area Network of Drug Users [VANDU]) and legal advocacy organization (Pivot Legal Society) employed qualitative and spatial methods to examine the socio-legal contexts of evictions among PWUD in the Downtown Eastside (Fleming et al., 2019) and subsequent impacts of residential displacement. People reporting illicit drug use (other than cannabis) who had been recently evicted (past 60 days) from privately-owned and non-profit SROs in the neighbourhood were eligible to participate. Participants were recruited through outreach by peer researchers—PWUD trained in research—in drop-in spaces and street-based settings, and referrals from local drug user, sex worker, and tenant rights organizations. Women were oversampled relative to their representation in the neighbourhood and we have reported on gendered dynamics of evictions elsewhere (Collins, Alexandra B. et al., 2018). A total of 56 PWUD were recruited, 41 of whom completed follow-up interviews (see demographics in Table 2). Participants were lost to follow-up due to fatal overdoses, displacement to other communities, and incarceration or court-mandated treatment.

Data collection was undertaken between June 2015 and July 2016 and involved qualitative interviews and geo-spatial data collection to document: (1) circumstances surrounding evictions; (2) changes to everyday routines following residential evictions; and (3) impacts of residential evictions on risk, harm, and social outcomes (e.g., overdose, violence). Interview guides were developed in consultation with community partners and used to facilitate interviews. Go-along interviews (Carpiano, 2009) were conducted during the first

wave of interviews in Summer 2015, in which we accompanied participants on a neighbourhood walk to document places central to their daily lives (e.g., drug scene locations, community services). These were followed by an office-based interview. However, out of concern that go-along interviews placed an undue research burden on participants (typically two hours in addition to office-based interviews), these were replaced with qualitative mapping exercises that documented geographic information on printed maps during office-based interviews (typically 30 to 60 minutes). Follow-up qualitative interviews and mapping exercises were conducted with participants three to six months after baseline to document longer-term impacts of evictions. Written informed consent was obtained prior to both baseline and follow-up interviews. Interviews were audio recorded and transcribed by professional transcriptionists. Participants received \$30 cash honorarium following each interview.

We analyzed data through a multi-step computer-aided qualitative GIS approach to interface geospatial and qualitative data within Q-GIS, a geographic information software program, and NVivo, a qualitative data analysis software program (Jung and Elwood, 2010). Geospatial data were imported into Q-GIS and used to produce aggregate maps depicting, for example, the distribution of evictions and locations where people engaged in drug use and survival activities pre- and post-eviction (e.g., where people consumed drugs, engaged in income generation). The latter maps helped us to better understand how spatial practices surrounding drug use and related survival activities were impacted by disruptions associated with evictions. We then imported interview transcripts into NVivo and developed a spatially-informed coding framework based on aggregate mapping data. We expanded the coding framework to include codes informed by the interview guides, field observations by team members, and input from community partners. This spatially-informed coding framework assisted us with triangulating spatial and qualitative data by including codes that enabled us to delineate the distribution of, and changes to, daily activities post-eviction (e.g., where drugs were purchased and consumed, work locations) and identify neighbourhood locations critical to participants post-eviction (e.g., public drug use settings, harm reduction and emergency shelter facilities). We focused here on changes rather than other spatial measurements (e.g., distances from harm reduction facilities) because we determined that, due to the precarity of our participants and relatively small geographic area of the Downtown Eastside, even the smallest of disruptions had profound impacts. Additionally, the coding framework also included codes that explored social meanings ascribed to specific places or types of places (e.g., alleyways, harm reduction facilities) by our participants. Interview transcripts were coded by multiple team members (RM, TF, ABC). The coding framework was revised during subsequent research team meetings until finalized. We drew upon the concepts of ‘structural vulnerability’ (McNeil et al., 2015b; Quesada et al., 2011) and ‘spatial practices’ (De Certeau, 1984) to interpret our findings. We aimed to understand how participants engagement with space and their drug use following residential eviction (spatial practices) were shaped by vulnerabilities stemming from their position within hierarchies of power and privilege (structural vulnerability).

Participants were assigned pseudonyms. With the exception of a supervised injecting facility (Insite), specific locations in the Downtown Eastside are not named due to concerns that the identification of specific buildings and drug scene locations might subject participants to

heightened surveillance (Collins et al., 2019). This study was approved by the Providence Healthcare/University of British Columbia Research Ethics Board.

### 3. RESULTS

Despite its relatively small size (see Figure 1), forms of social violence operating within the Downtown Eastside's street-based drug scene, notably place-based policing strategies and gendered and racialized violence (Collins et al., 2019; McNeil et al., 2015a; McNeil et al., 2014a), shaped how participants navigated the neighbourhood and often restricted their daily activities to relatively small areas (e.g., areas east or west of Main Street). Participants had to renegotiate space as they sought to establish routines that might enable them to manage post-eviction substance use and survival within the context of drug criminalization and extreme poverty. We describe dynamics shaping the spatial practices and patterns of participants post-eviction and their implications for drug-related harms, focusing on how participants: (1) navigated uncertainty in drug purchases amidst the growing proliferation of fentanyl within the local drug supply; (2) negotiated spaces of drug consumption and implications for their drug use practices; and (3) changed their drug use patterns as they sought to eke out post-eviction survival.

#### 3.1. Navigating drug sellers and a drug supply in transition

As fentanyl began to replace heroin within the illicit opioid supply over the course of this study, participants navigated the uncertainty of the illicit drug supply alongside the disruptions and hardships associated with eviction. The majority of participants had routinely purchased drugs from 'trusted' drug sellers prior to eviction – that is, those with whom they had established longstanding relationships and whom they believed sold drugs not containing fentanyl or having consistent potency. A minority of participants maintained relationships with their trusted drug sellers post-eviction, in part due to the protections proffered by these relationships (e.g., accumulating drug debts without risk of violence) and out of concern about changes to the drug supply. 'Joel', a 31-year-old Indigenous man, expressed concern regarding increased fentanyl in the drug supply during his baseline interview and emphasized the importance of continuing to purchase from trusted drug sellers post-eviction:

I just pretty much get it... always got it from certain people. Like I don't... I don't deal with that many people, because... well, for one reason is the fentanyl that started hitting the street and killed a lot of people. So I just stuck to people I knew that didn't sell it.

At follow-up, Joel only purchased from one trusted drug seller due to the continued escalation of fentanyl-related overdoses. For Joel, as with other participants, continued relationships with trusted drug sellers post-eviction were possible because their spatial patterns had not changed dramatically. Pre- and post-eviction mapping data revealed that they continued to spend most of their time within a short distance of their former housing, often staying with friends, in emergency shelters, or outside. Further, these participants also continued to engage in income-generating activities (e.g., street vending) and access community programs in the same locations, which were concentrated in areas where they

had purchased drugs pre-eviction, and the continuity of such spatial practices were critical in allowing them to maintain relationships with trusted sellers. Other participants were able to maintain these relationships because they were connected with drug sellers who delivered drugs ('dial-a-dope'). While participants maintaining relationships with trusted drug sellers reported other drug-related harms as outlined in subsequent sections, they seldom reported opioid-related overdose at baseline or follow-up.

However, participants who experienced dramatic changes to their spatial practices had to navigate an uncertain drug supply and complex, sometimes predatory, relationships with drug sellers post-eviction. The intersection of housing vulnerability and extreme poverty prevented these participants from establishing post-eviction routines, as they frequently had to change where they spent the night or engaged in income-generating activities (e.g., recycling, sex work). Among women, gender diverse persons, and Indigenous persons, these hardships were compounded by pervasive gendered and racialized violence and place-based policing strategies (e.g., street sweeps) which necessitated changing their everyday patterns to limit exposure to interpersonal violence and police. Mapping data showed that these participants were displaced from trusted drug sellers and moved around too frequently to establish strong relationships with new drug sellers. Instead, participants often purchased drugs from whoever was nearby, especially when experiencing the onset of opioid withdrawal (i.e., dopesickness). This increased their likelihood of coming into contact with fentanyl, which was not yet uniformly distributed within the local drug supply. 'Jessie,' a 54-year-old white transgender woman, was concerned about fentanyl and had begun carrying naloxone, and had recently experienced an overdose after purchasing from an unfamiliar drug seller. "[My eviction] *made it* [accessing a trusted source] *more difficult for a number of reasons*," she explained. "*Because you're displaced, you're not in your area – you're not on that walk.*" Although some participants explained that they tried to reduce their overdose risk by "*eyeballing*" drugs to ascertain whether or not they contained fentanyl (i.e., assessing visual characteristics like color or consistency), such strategies were insufficient in managing these risks and many of these participants reported experiencing overdoses.

### 3.2. Spaces of drug consumption and drug use practices

Because most participants had been evicted into homelessness and remained vulnerably housed at follow-up, they lost access to private drug use settings and had to renegotiate where they used drugs post-eviction. All participants reported consuming drugs in public spaces post-eviction (e.g., sidewalks, doorways, alleyways) and mapping data showed that these locations were distributed throughout the Downtown Eastside. Those who were unable to establish routines, experienced significant disruptions to spatial practices surrounding drug use and income generation, and needed to consume drugs upon purchase to manage withdrawal reported the most public drug use locations. Here, participants often emphasized the tensions surrounding public drug use – namely, feelings of shame and drug-related risks resulting from the stigmatization and criminalization of drug use. However, they noted that the intersection of housing vulnerability and extreme poverty made public drug use inevitable post-eviction. 'Miranda,' a 31-year-old white woman, described accompanying feelings of resignation:

*I used to care if I was seen doing that kind of thing outside and now I obviously don't care. That's the messed up part. I actually used to care whether or not my cousin or my dad or anybody who knew me or, you know, old friends of the family ever saw me down there. [It] would be horrific... And now, I don't have anything else to lose.*

Other participants emphasized these tensions in relation to street-level policing, noting that post-eviction public drug use rendered them more visible to police, something particularly emphasized by Indigenous participants.

Although public drug use was considered inevitable, participants employed strategies to limit using in public and conceal their drug use from police and passersby. Some participants reported injecting at Insite more frequently post-eviction to minimize visibility and, in some cases, due to concern about rising fentanyl-related overdoses. Most of these participants had re-established daily routines (e.g., income generation, drug purchases) that regularly placed them in close proximity to Insite, while others used the facility more episodically. For example, although 'Nathan,' a 45-year-old Indigenous man, was spending nights beneath an underpass just outside the Downtown Eastside at follow-up, he spent most of his days selling cigarettes on the blocks surrounding Insite to support his opioid use and viewed it as a safer, more appropriate place to use – someplace that would reduce his exposure to racialized policing practices (e.g., carding) well-documented in Vancouver. He explained:

*We're using Insite 'cause it's a safe place to go. I don't think it's right to use right out on the street for people to see it like that. I don't have a place to go so that's so that place's [i.e., Insite] inside and safe.*

However, Insite could not always meet demand for its services during peak periods of community drug use (e.g., days surrounding the monthly disbursement of social assistance payments) and participants often had to use in public. 'Liam,' a 40-year-old white man, explained:

*Insite's usually backed up a lot by the number of people going there. A lot of times when I'm scoring dope, I'm dope-sick and don't want to wait. So, I just sit in the front or sit in the lane [and inject there].*

Participants also sought to conceal their drug use by using in public settings less visible to passersby and police, with qualitative and mapping data showing these spaces to include doorways, alleyways, and parks. While the numerous harm reduction distribution sites in the neighbourhood enabled participants to easily access harm reduction supplies post-eviction and was protective against syringe-sharing, public drug use settings were characterized by unsafe and unsanitary conditions (e.g., garbage, rats) that rendered participants vulnerable to drug-related harm and social violence. Participants emphasized how the need to avoid street-level policing and maintain hypervigilance about drug scene violence led them to rush drug use, making them more vulnerable to overdose and injection-related infections, with those most vulnerable to these forms of social violence (e.g., women, gender diverse persons, Indigenous persons) most impacted. For example, 'Wanda,' a 37-year-old Indigenous woman who reported being frequently subjected to police harassment and gendered violence, often rushed injections in public and subsequently experienced a suspected





to the increased availability of the drug and its low cost. These participants emphasized how stimulants, and primarily methamphetamine, were used as part of an adaptive strategy to the social and structural violence of homelessness, with the stimulating effects of these drugs giving them energy and helping them to stay awake for long periods of time (a few days to a week). Most of these participants emphasized the need to not only evade police but to protect their personal possessions from people in the neighbourhood and regular street clean-ups by city workers who would throw away people's belongings when left unattended. Miranda explained:

I've been struggling with heroin for years and years, but it [the eviction] kind of reset me off into doing crystal meth because you're afraid to fall asleep when you have what little personal belongings you have with you. Somebody's going to steal it. If they could take your shoes off your feet and have you not wake up, they would do it. That's how bad it's gotten.

Here, stimulants were positioned as central to post-eviction survival among these participants. They reported that prolonged binges of methamphetamine, in particular, ultimately led to severe health complications, including injection-related infections, periods of psychosis, and suicide attempts, as well as mental health apprehensions by police.

#### 4. DISCUSSION

Our findings focus attention on how structural vulnerabilities produce overdose and other drug-related risks among PWUD as they navigated eviction-related disruptions to their routines and spatial practices alongside changes to the illicit drug supply. In doing so, our findings focused on critical aspects of drug use: (i) drug purchases; (ii) drug use locations; and (iii) drug use patterns. Consistent with previous research on relationships with drug sellers where illicit drug supplies are characterized by fentanyl (Bardwell et al., 2019a; Betsos et al., 2021; Carroll et al., 2020), we documented how relationships with trusted drug sellers were perceived as protective in regards to the drug supply and risks of violence (e.g., debt collection). Participants who experienced minimal disruptions to their spatial practices post-eviction maintained these relationships and, in turn, were less likely to report experiencing overdoses – a dynamic warranting further attention and pointing to the potential of harnessing these relationships for harm reduction purposes. Of particular concern, however, is that participants displaced from trusted drug sellers were compelled to purchase drugs from multiple sources, often while under duress (dopesick), and more commonly reported overdoses and other harms (e.g., violence). Given that our study was undertaken in a neighbourhood in which low-threshold medication-based treatments (buprenorphine, methadone) were available and yet seldom discussed by participants, these alone are unlikely to mitigate harms even though scale-up represents a public health priority. Here, safe supply programs providing PWUD with pharmaceutical alternatives to potentially toxic illicit drugs represent a promising approach to be pursued that have been demonstrated to attract PWUD and reduce their consumption of illicit drugs while mitigating the impacts of structural vulnerabilities (Ivsins et al., 2020a; Ivsins et al., 2020b, c). Further, such programs would likely be critical in stabilizing post-eviction drug use patterns and, thereby, reducing the harms associated with withdrawal and binge cycles among those oscillating

between withdrawal and drug binges. Further partnering safe supply programs with peer- and street-based outreach programs, including those led by women, gender diverse persons, and racialized PWUD, might also aid in reaching displaced PWUD, and especially those most impacted by eviction-related harms.

Importantly, our findings underscore the tensions that arose as participants re-negotiated where they used drugs post-eviction. Participants primarily used drugs in their SRO pre-eviction and, while these environments have been characterized as overdose risk environments (Bardwell et al., 2019b), evictions made public drug use inevitable and exposed participants to the social violence (e.g., street-based policing, stigma, interpersonal violence) that characterizes public drug use settings and has gendered and racialized patterns (McNeil et al., 2015c; McNeil et al., 2014b; Rhodes et al., 2007). Previous research has framed public drug use as a situational necessity out of opportunity (e.g., drug availability) or urgency (e.g., withdrawal or cravings) (Rhodes et al., 2007) and yet foregrounding how it is made necessary by structural inequities – in this case, evictions and homelessness – might better focus attention on much needed housing interventions and policy responses (e.g., rapid rehousing interventions, anti-eviction policies, investments in affordable housing). Furthermore, that the social violence accompanying public drug use is unevenly distributed on the basis of gender and race further points to the need to act pursuant to achieving health and social equity. Building on previous research demonstrating their role in attracting structurally vulnerable PWUD and reducing public drug use (Wood et al., 2004), it is noteworthy that participants often frequented Insite post-eviction as an alternative to public drug use. While the operational capacity of Insite constrained their access, low-threshold supervised consumption services were subsequently scaled up in the Downtown Eastside beginning in December 2016 in response to escalating fentanyl-related overdoses (Collins, A. B. et al., 2018). Alongside their critical role in addressing overdose and violence (Boyd et al., 2018; Marshall et al., 2011), among other outcomes, cities should pursue these sites and ensure sufficient coverage to provide alternatives to public drug use that support and affirm the dignity of PWUD.

Finally, our findings draw attention to how increased methamphetamine use can paradoxically represent an adaptive strategy to structural vulnerabilities (e.g., policing, homelessness) amplified by evictions while resulting in severe health harms (e.g., suicide attempts). Explanations of rising methamphetamine use across North America have often focused on transformations within illicit drug markets, overlooking the socioeconomic marginalization underlying these changes despite associations between methamphetamine use and poverty (Shearer et al., 2020). Social sciences research has long documented instrumental uses of stimulants as an adaptive strategy to, for example, the fatigue sometimes associated with medication-based treatments for opioid use and subsequent need for alertness in order to work (Bourgois, 2000; McNeil et al., 2020). Our findings extend this research and point to the need for alternate explanations of substance use to the ‘brain disease’ model of drug use that account for the ways in which substance use serves as an adaptive strategy to materials conditions. Here, our findings underscore the need to policy and programmatic interventions that address the structural inequities fostering conditions that shape drug use and related harms, including drug policy reforms (e.g., decriminalization) and social welfare programs (e.g., income and housing supports).

This study has several limitations. Because participants were lost to follow-up for reasons including overdose and incarceration, our findings likely understate the adverse impacts of evictions. Further studies involving data linkages between housing, health, and criminal justice databases are likely necessary to better characterize these impacts. Our study was undertaken in a setting with comprehensive harm reduction supports, and the absence of these supports elsewhere might increase vulnerability to harms. Finally, some drug-using populations, notably gender diverse persons and non-Indigenous persons of color, were underrepresented in our study and, given that systems of oppression render them disproportionately vulnerable to harm (Logie et al., 2012), further research on their post-eviction experiences remains needed.

In conclusion, our study demonstrated how post-eviction changes to routines and spatial patterns changes dynamics of drug use (drug purchases, drug use locations, and drug use patterns) in ways that produced considerable harms as fentanyl overtook the drug supply alongside rising methamphetamine use. These findings underscore the urgent need to implement harm reduction supports while also pursuing comprehensive structural interventions to mitigate overdose and other drug-related harms exacerbated by the intersections of structural vulnerabilities and ongoing changes to illicit drug markets.

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### Highlights

- Study examines impacts of evictions on people who use drugs in Vancouver Canada
- Evictions posed challenges to navigating drug supply changes
- Evictions interrupted access to trusted dealers when fentanyl widespread
- Evictions led to public drug use and related harms
- Evictions disrupted drug use patterns while increasing methamphetamine use



Figure 1. Vancouver's Downtown Eastside

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**Table 1.**

## Participant demographics

|   | Baseline (n=56) | Follow-up (n=41) |
|---|-----------------|------------------|
| <b>Age</b>                                    |                 |                  |
| <i>Mean</i>                                   | 43.5            | –                |
| <i>Range</i>                                  | 24–67           | –                |
| <b>Gender</b>                                 |                 |                  |
| <i>Men</i>                                    | 35 (62.5%)      | 25 (61.0%)       |
| <i>Women</i>                                  | 18 (32.1%)      | 13 (31.7%)       |
| <i>Transgender, Two-Spirit, or non-binary</i> | 3 (5.4%)        | 3 (7.3%)         |
| <b>Ethnicity</b>                              |                 |                  |
| <i>White</i>                                  | 29 (51.8%)      | 21 (51.2%)       |
| <i>Indigenous</i>                             | 21 (37.5%)      | 16 (39.0%)       |
| <i>Other</i>                                  | 5 (8.9%)        | 4 (9.8%)         |
| <b>Drugs Used (past 30 days)<sup>a</sup></b>  |                 |                  |
| <i>Opioids</i>                                | 33 (58.9%)      | 21 (51.2%)       |
| <i>Methamphetamine</i>                        | 31 (55.4%)      | 18 (43.9%)       |
| <i>Crack Cocaine</i>                          | 22 (39.3%)      | 13 (31.7%)       |
| <i>Cocaine</i>                                | 14 (25.0%)      | 8 (19.5%)        |
| <b>Evicted into homelessness</b>              | 47 (83.9%)      |                  |

<sup>a</sup> Possible to report use of more than one drug