

# CATIE STATEMENT

## on the need for a spectrum of substance use services

*This CATIE statement summarizes the evidence on the need for a spectrum of substance use services to support the health of people who use drugs.*

---

JUNE 2025



Canada's source for  
HIV and hepatitis C  
information

*This CATIE statement was developed to support service providers and policy-makers to make informed decisions about the spectrum of substance use services.*

## **KEY MESSAGE**

A diverse range of substance use services is essential to support the health of people who use drugs in Canada. The term substance use services refers to various programs that provide supports related to substance use. They include both harm reduction and treatment programs. These two types of programs are complementary components of the spectrum of substance use services, each playing vital roles. Services across this spectrum need to be widely available and easily accessible to meet community needs.

## **RECOMMENDATIONS**

### **1. Ground the spectrum of services in an evidence-based understanding of substance use**

The need for a spectrum of services is rooted in the complexity of substance use. People use drugs for a wide variety of reasons, and substance use occurs along a spectrum that includes non-use (abstinence), beneficial use (use that has positive health or spiritual effects, including pleasure, relaxation and euphoria), lower risk use (use that has minimal impacts on the individual and those around them), higher risk use (use that is harmful for the individual and/or those around them) and substance use disorder (a treatable medical condition characterized by continued use despite negative impacts to the individual and/or those around them). Most people who use drugs do not develop substance use disorder. Individuals may move back and forth along this spectrum over time. Understanding that substance use is complex is essential for developing effective, comprehensive and compassionate responses.

No single approach or program can meet everyone's needs. Implementing a spectrum of evidence-based substance use services that respond to diverse needs is the most promising way to reduce drug-related harms and promote health and well-being. Policy-makers and service providers must ensure that these services are responsive and flexible and that they prioritize meeting people's self-determined needs. By doing so, they can reduce the harms of substance use and improve individual, community and population health.

Policy-makers should allocate resources to develop and sustain a spectrum of services. Policy-makers also need to examine and address social and structural inequities that underlie drug-related harms. Service providers play a key role by offering harm reduction and treatment programs that can reduce drug-

related harm for individuals. They can also connect individuals with broader health and social services that can address peoples' needs related to social determinants of health, improving outcomes for people who use drugs.

### **2. Recognize that harm reduction and treatment programs are complementary components of the spectrum of substance use services**

Harm reduction and treatment programs support people who use drugs in different but complementary ways. The substance use services that an individual may want or need depend on several factors, including where their use falls on the spectrum of substance use.

Some people use substances rarely, occasionally or regularly without developing a substance use disorder. Harm reduction programs are essential because they provide resources and education that reduce potential harms associated with using drugs, helping to keep these individuals healthy, safe and connected to care. People who do not have a substance use disorder typically do not need treatment programs, as treatment is primarily designed to support those with substance use disorders.

For people who develop a substance use disorder, harm reduction programs are essential because they can keep them healthy, safe and connected to care. These programs play an important role before, during and after treatment. People with substance use disorder may also choose to access treatment programs, which provide supports to help manage, reduce or stop their substance use.

While myths and misconceptions position harm reduction and treatment as opposing approaches, they are actually complementary. Harm reduction programs are proven to reduce the harms associated with substance use and improve access to and uptake of treatment. Voluntary, evidence-based treatment programs are proven to help people to manage, reduce or stop their substance use, while also helping to reduce harms. Best practice treatment programs also integrate harm reduction principles throughout their care services.

Both harm reduction and treatment need to be available to help people who use substances to improve their health and quality of life. Service providers and policy-makers should recognize the complementary nature of harm reduction and treatment programs and find ways to improve continuity of care between harm reduction and treatment services.

### **3. Support and expand availability of evidence-based harm reduction programs**

Harm reduction programs focus on reducing harms associated with drug use, drug policies and drug laws. They provide evidence-based strategies and resources to minimize harms

associated with substance use. They reduce the transmission of infectious diseases, reduce overdose, reduce healthcare costs and connect people who use drugs to other health and social services, including treatment. Harm reduction recognizes that not everyone wants to, is ready to or is able to stop using drugs. It focuses on reducing harms associated with drug use and improving health and well-being without requiring abstinence. Harm reduction programs that have been shown to reduce harms for people who use drugs include services that distribute safer drug use equipment, supervised consumption services and overdose prevention sites, naloxone distribution programs, drug checking programs and safer supply programs.

Despite strong evidence that harm reduction programs are effective, the availability and capacity of harm reduction programs is inconsistent across Canada, creating barriers to access for individuals and communities. Harm reduction programs must be made available and scaled up across Canada to ensure equity and to meet community needs. Policy-makers can provide funding to expand access to harm reduction programs, support service providers to implement a range of harm reduction programs in their communities, and develop standards to ensure programs are accessible and evidence based.

Service providers can familiarize themselves with the harm reduction programs available in their communities and understand how these programs support individuals. To improve availability and accessibility, service providers can work toward expanding the range of harm reduction programs they offer (e.g., by integrating and co-locating services, by establishing referral pathways to other programs within the community). By collaborating with other service providers and leveraging existing resources they can support individuals to access the programs and supports they want and need.

#### **4. Support and expand availability of voluntary, evidence-based treatment programs**

Voluntary, evidence-based treatment programs are an essential part of the spectrum of substance use services. They include a range of programs that can help people to manage, reduce or stop their substance use. Treatment programs may provide medications, psychosocial counselling, peer support and other resources to help people to reach their self-determined goals. Treatment programs include opioid agonist therapy (OAT), psychosocial treatment (e.g., contingency management, cognitive behavioural therapy), withdrawal management and other social supports, often in combination with one another. Treatment programs may be delivered by providers in in-patient, residential or community settings. However, the

availability of affordable, timely and evidence-based treatment is inconsistent across Canada, creating barriers to access.

Affordable voluntary, evidence-based treatment programs for individuals with substance use disorder must be scaled up across Canada to ensure equitable availability to meet community and individual needs in a timely manner. It is important to note that not all people who use substances need, want or qualify for treatment. Additionally, for people with a substance use disorder, it may take multiple attempts for treatment to be effective, and many people may need to try different programs to see which ones, if any, are effective for them. People across the spectrum of substance use may also reduce or stop their drug use without accessing formal treatment programs.

No single treatment approach is effective for everyone. Policy-makers and service providers should ensure that a diverse range of treatment programs exist and are brought to scale and that they are well integrated and coordinated to ensure continuity of care within a given region.

The regulation of and accountability mechanisms for treatment programs can vary widely depending on factors such as their funding model, the type of treatments they provide, the professional affiliations of staff providing services and the setting in which services are provided. Policy-makers should work to ensure that all treatment models are regulated and that accountability mechanisms are in place for them, including proper oversight, standards, reporting, and long-term follow-up to evaluate the effectiveness of treatment programs in supporting the health of individuals and in meeting community needs.

Service providers should be aware of the evidence-based treatment programs available in their communities, as well as the types of services and supports that different treatment programs provide. This will help them to refer service users to the best programs for them: the programs that provide the type(s) of services that they want, that they qualify for, that are appropriate for them and that they can afford.

#### **5. Address barriers that limit access to the spectrum of substance use services**

Access to the spectrum of substance use services is hindered by a variety of barriers at the individual, social and structural levels, including:

- long distances to travel for services
- long wait times
- limited operating hours

- insufficient service capacity
- high costs for some treatment programs
- limited resources or programs that serve certain groups of people who use drugs (e.g., people who smoke drugs, people with stimulant use disorder, people with concurrent mental health challenges, youth, Indigenous people who use drugs)
- lack of continuity of care between services
- limited awareness of available services and supports

These barriers are especially pronounced in rural and remote communities, but they also affect people in urban locations. They create health inequities by preventing people from obtaining the resources and supports they need, when they need them.

Service providers can take various steps to try to reduce barriers within their community. Service providers should regularly evaluate whether their programs are meeting community needs and adapt their programs accordingly, where possible. They can also work to strengthen connections with other local harm reduction and treatment programs to improve referrals, increase capacity and improve coordination of care. In addition, service providers can address practical barriers (e.g., by assisting with travel, offering virtual or mobile programs) and enhance awareness of available supports (e.g., through education and outreach). Service providers may also consider innovative approaches, such as co-locating and integrating programs and developing health navigation supports to reduce the barriers associated with accessing certain programs.

Service providers need support from policy-makers to ensure funding is available and sustainable to reduce barriers to care. Policy-makers can also prioritize funding and policies that increase the capacity, accessibility and geographic reach of programs, especially in underserved areas. Addressing these barriers can create a more accessible, effective and coordinated system of substance use services, ensuring individuals receive the resources and care they need, when they need them.

## **6. Ensure services respect the rights of people who use drugs**

It is essential that all substance use services are evidence-based and voluntary. These services should uphold the right to health of people who use drugs. This means that services must respect the rights of people who use drugs to health education and information, bodily autonomy, equality and non-discrimination, social determinants of health and meaningful participation in decision-making.

Service providers and policy-makers should involve people who use drugs in the design, delivery and evaluation of the spectrum of substance use services to ensure that programs meet people's needs, are culturally safe, avoid stigmatizing practices and respect their human rights.

Policy-makers should also develop rigorous standards and accountability mechanisms for all substance use services to ensure that programs are evidence based and adequately protect the health and human rights of individuals who use drugs and their communities.

## **ADDITIONAL RESOURCES**

The Mental Health and Substance Use Health Standardization Roadmap – Standards Council of Canada

Public Health Approaches to the Toxic Drug Crisis – Canadian Public Health Association

Best Practices across the Continuum of Care for the Treatment of Opioid Use Disorder – Canadian Centre on Substance Use and Addiction

Opioid Agonist Therapy – Canadian Centre on Substance Use and Addiction

Harm Reduction Fundamentals: A toolkit for service providers – CATIE

## **EVIDENCE REVIEW**

### **Evidence about substance use**

Substance use is a complex human behaviour. People use drugs for diverse reasons, and drug use occurs along a spectrum. This spectrum ranges from non-use (abstinence), beneficial use (use that has positive health or spiritual effects, including pleasure, relaxation and euphoria), lower risk use (use that has minimal impacts on the individual and those around them) and higher risk use (use that is harmful for the individual and/or those around them) to substance use disorder (a treatable medical condition characterized by continued use despite negative impacts to the individual and/or those around them).<sup>1</sup> As with any behaviour, people may move back and forth along this spectrum over time. Most people who use drugs do not develop substance use disorders; research estimates that about 10% to 30% of people who use drugs develop a substance use disorder.<sup>2,3</sup>

The likelihood that people will use substances, where their use will fall along the spectrum and whether they will experience harms from substance use are influenced by the conditions in which they grow up, live and work. For example, people who develop substance use disorders are more likely to have

experienced significant challenges in their lives, including mental health challenges, adverse childhood experiences, traumatic events or challenges related to social determinants of health (e.g., income, housing).<sup>4-6</sup> Harms from substance use are also shaped by these factors and others, including laws and policies that criminalize drug use and structural factors such as racism, colonialism and gender inequities that increase risks of drug-related harms for certain populations.<sup>7,8</sup>

In Canada, harms related to illegal drugs have increased dramatically over the past decade. Since the mid-2010s, overdose deaths have constituted an ongoing public health crisis across Canada.<sup>9</sup> Infectious diseases associated with drug use, such as hepatitis C and HIV, remain significant concerns; people who inject drugs account for a substantial proportion of these infections.<sup>10,11</sup> Serious bacterial infections are increasing among people who inject drugs, which can be associated with significant morbidity and mortality.<sup>12,13</sup> Harms associated with substance use extend beyond the individual who uses drugs to the individual's social networks, their community and to society at large, such as through strains on the healthcare and criminal-legal systems and costs to society related to lost productivity (e.g., because of premature death or disability).<sup>14</sup> These costs increased nearly 30% between 2007 and 2020.<sup>14</sup>

While drug-related harms have increased, over the same period the rate of substance use disorder in the Canadian population has remained stable.<sup>15</sup> This suggests that factors other than substance use disorder are driving drug-related harms in Canada. Changes in the illegal, unregulated drug supply are one of the key factors that has led to increased harms. Fentanyl has replaced heroin as the dominant illegal opioid in most of Canada over the past decade and is now the primary driver of overdose deaths.<sup>16,17</sup> Fentanyl is 20–40 times stronger than heroin, significantly increasing the risk of overdose.<sup>18</sup> Recent events such as the COVID-19 pandemic and related border closures have led to an even more dangerous and toxic illegal drug supply.<sup>19,20</sup> Since the COVID-19 pandemic, even stronger synthetic opioids (e.g., nitazenes, carfentanil) and sedatives (e.g., benzodiazepines, xylazine, medetomidine) have been detected or have become a lasting part of the drug supply in some regions.<sup>21–23</sup>

### **Evidence about the need for a spectrum of substance use services**

A spectrum of substance use services is needed because no single approach or program can meet everyone's needs. As described above, substance use is complex. A range of evidence-based substance use services need to be available, accessible and acceptable to support the right to health of

people who use drugs.<sup>24–26</sup> This means that services must respect the rights of people who use drugs to health education and information, bodily autonomy, equality and non-discrimination, social determinants of health and meaningful participation in decision-making.<sup>24–26</sup> Ensuring access to a spectrum of substance use services recognizes this complexity and gives people who use drugs the best opportunity to decide which programs and supports they want and need at a given moment.

Offering a spectrum of services supports the agency of people who use drugs. A principle of harm reduction involves “meeting people where they’re at.”<sup>27</sup> This principle acknowledges that different people may access the same programs with different goals and at different times and may desire different outcomes. For example, people may access supervised consumption services (SCS) or overdose prevention sites (OPS) to reduce immediate risks associated with substance use (e.g., overdose), but as they develop relationships and trust with staff over time, they may be supported to access other health and social services, including treatment.<sup>28</sup> Given the toxicity of the current illegal drug supply,<sup>16,21</sup> providing resources and supports to help people to stay alive is an urgent priority. Lower barrier harm reduction services are essential to addressing this challenge. They continue to be an important part of the spectrum of services for people seeking treatment, including helping keep people safe who are on wait lists for treatment, transitioning between treatment services or using substances after treatment. Access to harm reduction for people who use substances after treatment is particularly important because loss of tolerance can increase risk of overdose.<sup>29</sup>

Within the spectrum of services, there can be significant overlap between treatment and harm reduction programs. Best practice treatment programs integrate harm reduction principles throughout their care, and harm reduction programs can support people who want to access treatment.<sup>30</sup> For instance, safer supply, an emerging harm reduction approach, has goals that are similar to and overlap with those of treatment programs such as opioid agonist therapy (OAT) and injectable OAT.<sup>30,33,97</sup> All provide prescribed medications and reduce the risk of overdose<sup>31,32</sup> while also supporting people whose goals are to reduce or stop using substances overall.<sup>33–36</sup>

### **Evidence about approaches within the spectrum of substance use services**

The need for a spectrum of substance use services, including harm reduction and treatment, is supported by evidence of the effectiveness of these types of programs at reducing drug-related harms and supporting people who use drugs.



Evidence demonstrates that harm reduction programs reduce harms associated with drug use, are cost effective and improve access to treatment programs.<sup>37,38</sup> Voluntary, evidence-based treatment programs can support people with substance use disorder to manage, reduce or stop their drug use and can reduce harms associated with substance use.<sup>39</sup> Involuntary or coerced treatment is not supported by evidence and can be associated with human rights violations and other harms.<sup>40–44</sup>

The evidence base for harm reduction services varies by program. Some harm reduction services have operated in Canada and internationally for decades and there is strong evidence to support them.<sup>38,45–47</sup> Other harm reduction services, for which evidence is emerging, have been newly implemented in Canada in response to the public health crisis of drug toxicity deaths.<sup>48,49</sup> Harm reduction programs may be provided by dedicated harm reduction organizations or peer-based organizations, or they may be integrated into other healthcare and social service settings. Harm reduction programs may be publicly funded, supported by donations or run by volunteers. The availability of harm reduction programs is inconsistent across Canada. Certain harm reduction programs are not available in all provinces and territories.<sup>50</sup> Where harm reduction services are available, people may face numerous barriers to access, including a lack of availability of services, services that do not meet their substance use needs, and limited operating hours.

The evidence base for treatment services varies by program. Some treatment programs are supported by strong evidence.<sup>35</sup> However, certain treatment programs are not regulated in Canada. This means that there is limited accountability, reporting and tracking of program outcomes for some treatment providers.<sup>51–53</sup> Importantly, it may take multiple attempts for treatment to be effective, and many people may need to try different programs to see which ones, if any, are effective for them.<sup>52</sup> Some people may reduce or stop their drug use without accessing formal treatment programs.<sup>4,54</sup> Treatment programs can vary in many ways: services may be provided by licensed healthcare providers, by lay providers or by clients' peers; programs may be offered in the community (on an outpatient basis) or in a hospital or residential setting (on an inpatient basis); they may be run by private, for-profit organizations or by non-profit organizations; they may provide evidence-based programs (e.g., OAT) or programs that are not evidence based; programs may receive public funding or operate through out-of-pocket payment or donations; and treatment programs may prioritize abstinence and/or individuals' self-determined goals.<sup>39,51,52</sup> It is challenging to get a clear picture of the availability and accessibility of quality, evidence-based treatment programs in Canada. Available

information indicates that access is inconsistent, with wait times, cost and other barriers limiting access.<sup>51,52,55</sup>

#### *Safer drug use equipment distribution programs*

Distribution of safer drug use equipment involves providing people who use drugs with the equipment needed to support safer substance use practices (e.g., for safer injecting, smoking, snorting). Distributing safer injecting, smoking and snorting supplies reduces re-use and sharing of equipment,<sup>56,57</sup> which has been shown to prevent a wide range of health issues,<sup>47</sup> including:

- blood-borne infections such as hepatitis C and HIV
- serious bacterial infections such as cellulitis, abscesses and endocarditis
- tissue damage (e.g., cuts and burns to the mouth, vein damage, nasal passage damage)

Safer equipment distribution programs play a critical role in public health not only by providing new equipment but also through the safe collection and disposal of used equipment. These programs have equipment return rates that are typically 90% or more of what they distribute, with additional equipment often returned to nearby programs — without requiring one-for-one exchange.<sup>58</sup> This significantly reduces the accumulation of discarded drug use equipment in the community.

These programs are also a good investment. They have been shown to be cost effective, saving healthcare costs associated with treating viral and bacterial infections by reducing the spread of infections.<sup>37</sup> One study estimates that for every \$1 invested in safer drug use equipment, the healthcare system saves between \$1.30 and \$5.50 by preventing HIV infections alone.<sup>37</sup>

Importantly, the distribution of safer drug use equipment not only lowers the risks associated with drug use but also creates pathways to treatment. Research shows that people who access safer drug use equipment are more likely to enter treatment than people who do not access safer drug use equipment.<sup>59</sup> This demonstrates how the distribution of safer drug use equipment is a key component of a continuum of substance use services that supports the overall health and well-being of people who use drugs.

Access to safer drug use equipment remains inconsistent. The full range of safer drug use equipment is not distributed in all provinces and territories and, where equipment is available, it may not be distributed in adequate quantities.<sup>60</sup> In some provinces, there are restrictive and harmful policies such as requiring used supplies to be exchanged to access

new equipment.<sup>61</sup> Multiple barriers — from lack of policy and political support to limited operational hours and service locations — can limit access to adequate quantities of safer drug use equipment in parts of Canada.<sup>62–64</sup>

#### *Supervised consumption services (SCS) and overdose prevention sites (OPS)*

SCS and OPS provide safe, supervised spaces for people to use their drugs, where trained staff can respond to overdoses and other adverse events on site. Staff at SCS also provide people with safer drug use equipment, health education and referrals to other services. SCS have been found to:<sup>38,65,66</sup>

- reduce overdose deaths
- increase safer substance use practices (e.g., using new equipment for each injection) that prevent hepatitis C, HIV and other infections
- increase access to healthcare, including treatment and mental health services
- reduce public drug use and discarded syringes
- not increase crime or violence in the surrounding area

SCS have consistently been found to be cost effective.<sup>65,67</sup> They save money by preventing infections such as hepatitis C and HIV, by reducing overdose deaths and by reducing costs and pressure on emergency services by managing overdoses on site.<sup>65,68,69</sup>

SCS complement other aspects of the spectrum of substance use services. They complement the distribution of safer drug use equipment by providing education about safer substance use and helping to promote safer substance use practices.<sup>45</sup> They complement treatment programs by connecting people to care: accessing SCS has also been found to increase entry into treatment services, including withdrawal management and OAT.<sup>66</sup> SCS do not interfere with treatment outcomes. In communities where SCS operate, they do not reduce the rate at which people who use drugs enter treatment or increase the number of people who return to using substances after treatment.<sup>38,65</sup>

Currently, access to SCS in Canada is very limited. There are only a small number of operational sites, and some provinces and territories have none at all.<sup>50</sup> In addition, even when these services are available, they often fail to accommodate all forms of drug use, such as smoking. This is despite the shift to smoking; it has become the most common route of drug consumption resulting in death in some regions.<sup>50,70–72</sup> Even when SCS are available, they may not be open when needed

or may be located too far away from people who want to access them.<sup>73–75</sup>

Virtual spotting options, such as the National Overdose Response Service (NORS), provide additional options for overdose prevention for people without access to SCS and OPS. Emerging evidence suggests that this option may help fill gaps in access to physical SCS, may be more acceptable to women and gender-diverse people and is cost effective.<sup>75–79</sup>

#### *Naloxone distribution*

Naloxone distribution programs, also called take-home naloxone, involve training people on how to respond to opioid overdose and providing them with naloxone. Naloxone is an opioid antagonist, which means it temporarily blocks the effects of opioids. It is used to prevent death and other harms by reversing an opioid overdose.

Naloxone distribution programs are effective at preventing opioid overdose deaths. Systematic reviews of these programs have found that they provide long-term improvement in knowledge about opioid overdose, they reduce opioid-related mortality and there is a strong association between naloxone distribution and overdose survival.<sup>80–82</sup> Naloxone distribution has been found to be cost effective, and it does not lead to increased substance use or to riskier substance use practices.<sup>83–86</sup>

Naloxone access varies significantly between provinces and territories.<sup>87</sup> Each jurisdiction has its own criteria for who is eligible for a free naloxone kit.<sup>87</sup> Stigma from healthcare providers can prevent people who use drugs from accessing naloxone in some regions, and issues with transportation and distribution in rural and remote areas can create challenges with access.<sup>87</sup>

#### *Drug checking*

Drug checking programs test unregulated drug samples to provide people with more information about the contents of their drugs. This information can allow people to make informed decisions about their use of tested substances. Drug checking programs can also facilitate monitoring of the unregulated drug supply, providing a tool to inform people who use drugs, harm reduction and treatment providers, and policy-makers about changing risks and trends in their community. Monitoring the drug supply can involve identifying expected and unexpected substances, detecting new substances and detecting drugs of concern.<sup>49</sup> Some common approaches to drug checking include providing people with test strips to check their drugs for specific substances (e.g., fentanyl, benzodiazepines, xylazine) or having people provide

a small sample of their drug to a trained technician to analyze using advanced technologies.<sup>88</sup>

Drug checking programs can reduce harms from the unregulated drug supply. Access to information about the contents of drugs supports people's autonomy and helps them to make informed decisions.<sup>89</sup> A systematic review found that drug checking services can influence people's intentions and actions.<sup>49</sup> Information from drug checking has been found to change behaviour in ways that can reduce the chance of overdose (e.g., doing a test shot, reducing the dose, not using alone).<sup>49</sup> It is possible that drug checking may influence local drug markets. People who use drugs have reported that information from drug checking allows them to make informed decisions about their drugs, which, over time, could encourage people who produce or sell drugs to better ensure their products meet consumer expectations.<sup>89</sup>

Even though drug checking has expanded rapidly in Canada in response to the increasing harms of the unregulated drug supply, there is significant regional variation in the availability of these services.<sup>89,90</sup> They are not available in all communities, provinces or territories. People who use drugs report that barriers to drug checking include not knowing where services are and not having a drug checking program in the area.<sup>91</sup>

#### *Safer supply*

Safer supply refers to providing pharmaceutical-grade alternatives to the unregulated drug supply for people who are at high risk of drug toxicity and other harms. It is an approach that aims to reduce individuals' risk of overdose death and support their health. Participants in safer supply programs often include people whose needs have not been met by traditional treatment approaches such as OAT. Safer supply is grounded in harm reduction principles and practices and builds on evidence from treatment approaches such as OAT and injectable OAT.

Evidence related to safer supply is rapidly evolving. Research to date suggests that participants in safer supply programs experience a range of positive outcomes for people who use drugs. This includes evidence that safer supply can help to:<sup>31,34,48,92-95</sup>

- reduce the risk of drug toxicity death for people who use drugs
- improve health and social outcomes for people who use drugs (e.g., reduce use of unregulated drugs, reduce opioid-related hospital visits and increase access to treatment of infections such as hepatitis C and HIV)

Emerging evidence suggests that safer supply complements other substance use services. Safer supply can improve access to treatment: it has been associated with an increased likelihood of receiving OAT,<sup>96</sup> it can help people start and stay on OAT<sup>97</sup> and it can help people improve their stability and their control over their drug use.<sup>98</sup> A recent comparison found similar outcomes between people receiving OAT and people receiving safer supply, with both groups having reduced opioid toxicity events, health care use, new infections and healthcare costs.<sup>99</sup>

Access to safer supply is very limited in Canada, and there is variation between provinces and territories and urban and rural regions.<sup>100-102</sup> Research suggests that barriers to safer supply exist at the policy, prescriber and program levels.<sup>34,103</sup> Recent funding cuts and program restrictions may further reduce access to safer supply.

#### *Opioid agonist therapy (OAT) and injectable opioid agonist therapy (iOAT)*

OAT and iOAT are evidence-based treatments for people with opioid use disorder.<sup>35,36,104</sup>

OAT involves prescribing medications that reduce opioid cravings and withdrawal symptoms, helping individuals manage opioid use disorder. OAT medications are long-acting opioids that bind to the same receptors as illegal opioids, preventing withdrawal symptoms without providing psychoactive effects. In Canada, OAT medications include methadone, buprenorphine and slow-release oral morphine.<sup>104</sup> OAT with methadone or buprenorphine is the preferred first-line treatment for opioid use disorder. OAT can be combined with other treatment programs (e.g., psychosocial counselling) to support retention.<sup>35,104</sup>

iOAT involves prescribing injectable medications to individuals who have tried but not benefited from OAT. The primary goal of iOAT is to improve the individual's health by reducing the risk of overdose and other health and social harms associated with injecting unregulated drugs.<sup>105</sup> The secondary goal is to engage individuals who have not benefited from standard OAT in care.<sup>105</sup> Medications used for iOAT include diacetylmorphine (pharmaceutical-grade heroin) and injectable hydromorphone. These can be prescribed by a physician to someone for whom standard OAT has not worked.<sup>36</sup> People receiving iOAT may also be prescribed OAT medications to help prevent withdrawal symptoms and cravings between doses or overnight. People receiving iOAT may be referred to other health and social services, including other treatment programs.<sup>105</sup>



Both OAT and iOAT are important programs within the spectrum of substance use services. They treat opioid use disorder by supporting people to reduce their use of opioids, reduce the harms associated with opioid use and reduce their risk of death.<sup>35,36,104</sup> OAT is associated with reduced risk of death from all causes, reduced risk of overdose<sup>32</sup> and reduced risk of hepatitis C and HIV transmission.<sup>106,107</sup> The reduction in the risk of hepatitis C and HIV associated with OAT is even greater when OAT is combined with the distribution of safer drug use equipment.<sup>57,106</sup>

Access to and retention in OAT and iOAT in Canada are a challenge.<sup>100,108–113</sup> Data indicate that OAT is not equally accessible in each province and territory.<sup>60</sup> Primary care physicians are the care providers who are most likely to provide treatments for substance use disorder such as OAT,<sup>114</sup> but access to OAT in primary care settings is limited (e.g., just 2% of family health teams and 7% of community health centres in Ontario provide OAT).<sup>53</sup> Research indicates that common barriers to accessing and staying on OAT include strict program requirements (e.g., daily pharmacy visits), a limited number of prescribers, and stigma and discrimination from healthcare providers (e.g., feeling shamed when accessing prescriptions, being subjected to invasive urine drug screening practices).<sup>112</sup> In addition, OAT providers often do not offer additional comprehensive services, such as primary care, counselling or mental health supports.<sup>53</sup> This can lead to gaps in care for people receiving OAT.<sup>115</sup> While retention in iOAT is much stronger than in OAT, access to iOAT is extremely limited.<sup>105,113,116</sup> In 2020, there were 19 iOAT programs serving just over 400 people across Canada.<sup>100</sup>

#### *Psychosocial and other types of treatment*

Psychosocial and other types of treatment programs include a broad range of treatment approaches (e.g., withdrawal management, counselling, peer support, residential treatment). These approaches play different roles in the treatment of different types of substance use disorders.

Psychosocial interventions may be offered in addition to OAT to support retention in treatment for people with opioid use disorder.<sup>104</sup> For stimulant use disorder, psychosocial approaches such as contingency management and cognitive behavioural therapy are the standard of care.<sup>117</sup> Contingency management, which involves providing incentives (e.g., cash, gift cards or other prizes) for continued abstinence, seems to be the most effective.<sup>118,119</sup> Research is underway about the potential to combine psychosocial treatment with medications to treat stimulant use disorder.<sup>120</sup>

Withdrawal management (i.e., detox) alone is not recommended for people with opioid use disorder; it should be combined with linkage to OAT or other ongoing treatment.<sup>35,121</sup> This is because withdrawal management on its own is associated with increased risk of returning to using unregulated drugs, hepatitis C and HIV transmission and overdose death.<sup>35</sup> Despite this evidence, only a minority of people receiving withdrawal management are linked with OAT or other ongoing treatment services within a month of being discharged.<sup>122</sup> Withdrawal management for stimulant use involves support to address symptoms of withdrawal and should involve connecting people to long-term treatment (e.g., contingency management, cognitive behavioural therapy).<sup>121</sup>

Access to psychosocial and other types of treatment is limited in Canada. There are barriers to treatment at the individual, social and structural levels.<sup>123</sup> For example, there are no consistent standards or regulations for residential treatment services, which limits implementation of best practice treatment approaches and creates challenges for people looking for quality, evidence-based treatment.<sup>51</sup> A minority of programs providing psychosocial and residential treatment can initiate OAT. Some treatment programs (e.g., residential programs) do not admit people who are on other forms of treatment, such as OAT.<sup>124</sup> Additionally, people may experience barriers to accessing the services that do exist. For example, long wait times (e.g., an average time of between 20 and 100 days),<sup>125,126</sup> financial barriers (e.g., private residential treatment programs that cost thousands of dollars and may not follow best practices)<sup>51</sup> and geographic barriers (e.g., having to travel long distances to access treatment) can all limit the accessibility of psychosocial and other treatment services. There is also a lack of continuity of care between treatment services, which can create barriers and prevent people from staying engaged in treatment programs.<sup>122</sup>

## REFERENCES

1. Health Canada. *Substance Use Spectrum*. Ottawa (ON): Health Canada; 2022. Available from: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/substance-use-spectrum-infographic.html>
2. United Nations Office on Drugs and Crime (UNODC). *World Drug Report 2015*. Vienna: UNODC Research; 2015. Available from: [https://www.unodc.org/documents/wdr2015/World\\_Drug\\_Report\\_2015.pdf](https://www.unodc.org/documents/wdr2015/World_Drug_Report_2015.pdf)
3. Santiago Rivera OJ, Havens JR, Parker MA et al. Risk of heroin dependence in newly incident heroin users. *JAMA Psychiatry*. 2018;75(8):863-4.

4. Jones CM, Noonan RK, Compton WM. Prevalence and correlates of ever having a substance use problem and substance use recovery status among adults in the United States, 2018. *Drug and Alcohol Dependence*. 2020 Sep 1;214.
5. Leza L, Siria S, López-Goñi JJ et al. Adverse childhood experiences (ACEs) and substance use disorder (SUD): a scoping review. *Drug and Alcohol Dependence*. 2021;221(November 2020):108563.
6. Grant BF, Saha TD, Ruan WJ et al. Epidemiology of DSM-5 drug use disorder results from the national epidemiologic survey on alcohol and related conditions-III. *JAMA Psychiatry*. 2016;73(1):39-47.
7. Rhodes T. The 'risk environment': a framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*. 2002 Jun;13(2):85-94. Available from: <http://www.sciencedirect.com/science/article/pii/S0955395902000075>
8. Collins AB, Boyd J, Cooper HLF et al. The intersectional risk environment of people who use drugs. *Social Science & Medicine*. 2019;234:112384. <https://doi.org/10.1016/j.socscimed.2019.112384>
9. Substance-related Overdose and Mortality Surveillance Task Group on behalf of the Council of Chief Medical Officers of Health. *Opioid- and Stimulant-related Harms in Canada*. Ottawa (ON): Public Health Agency of Canada; 2025 Mar. Available from: <https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/>
10. Popovic N, Williams A, Périnet S. National hepatitis C estimates: incidence, prevalence, undiagnosed proportion and treatment, Canada, 2019. *Canadian Communicable Disease Report*. 2022;48(11/12):540-9. <https://doi.org/10.14745/ccdr.v48i1112a07>
11. Public Health Agency of Canada. *HIV in Canada, surveillance report to December 31, 2022*. Ottawa (ON): Public Health Agency of Canada; 2024. Available from: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/hiv-canada-surveillance-report-december-31-2022.html>
12. Maguire DJ, Arora RC, Hiebert BM et al. The epidemiology of endocarditis in Manitoba: a retrospective study. *CJC Open*. 2021 Dec 1;3(12):1471-81.
13. Gomes T, Kitchen SA, Tailor L et al. Trends in hospitalizations for serious infections among people with opioid use disorder in Ontario, Canada. *Journal of Addiction Medicine*. 2022;16(4):433-9.
14. Canadian Substance Use Costs and Harms Scientific Working Group. *Canadian Substance Use Costs and Harms Report (2007–2020)*. Ottawa: Canadian Centre on Substance Use and Addiction; 2023. Available from: <https://csuch.ca/assets/documents/reports/english/Canadian-Substance-Use-Costs-and-Harms-Report-2007-2020-en.pdf>
15. Stephenson E. *Mental Disorders and Access to Mental Health Care*. Ottawa (ON): Statistics Canada; 2023; Available from: <https://www150.statcan.gc.ca/n1/en/pub/75-006-x/2023001/article/00011-eng.pdf?st=MRdOTuR9>
16. Health Canada Drug Analysis Service. *Spotlight: The Evolution of Fentanyl in Canada over the Past 11 Years*. Longueuil (QC): Health Canada; 2023 Mar. Available from: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/evolution-fentanyl-canada-11-years.html>
17. Kleinman RA. Fentanyl, carfentanil and other fentanyl analogues in Canada's illicit opioid supply: a cross-sectional study. *Drug and Alcohol Dependence Reports*. 2024 Sep;12:100240.
18. Health Canada. *Fentanyl*. Ottawa: Health Canada; 2024. Available from: <https://www.canada.ca/en/health-canada/services/substance-use/controlled-illegal-drugs/fentanyl.html>
19. Health Canada, Public Health Agency of Canada, U.S. Department of Health and Human Services. *Canada-U.S. Joint White Paper: Substance Use and Harms during the Covid-19 Pandemic and Approaches to Federal Surveillance and Response*. Ottawa (ON) and Washington (DC): Health Canada; 2022. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canada-us-white-paper-substance-use-harms-during-covid-19-pandemic-approaches-federal-surveillance-response.html>
20. Canadian Centre on Substance Use and Addiction. *Changes Related to COVID-19 in the Illegal Drug Supply and Access to Services, and Resulting Health Harms*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2020. Available from: <https://www.ccsa.ca/sites/default/files/2020-05/CCSA-COVID-19-CCENDU-Illegal-Drug-Supply-Alert-2020-en.pdf>

21. Canadian Centre on Substance Use and Addiction. *Nitazenes (CCENDU Drug Alert)*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2022. Available from: <https://www.ccsa.ca/nitazenes-ccendu-drug-alert>
22. Canadian Centre on Substance Use and Addiction. *Risks and Harms Associated with the Nonmedical Use of Benzodiazepines in the Unregulated Drug Supply in Canada (CCENDU Bulletin)*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2021. Available from: <https://www.ccsa.ca/sites/default/files/2021-12/CCSA-CCENDU-Nonmedical-Use-Benzodiazepines-Unregulated-Drug-Supply-Bulletin-2021-en.pdf>
23. Gilbert ML, Maurice-Gelinas C, Rodrigues J et al. *Spotlight: The Emergence of Xylazine in Canada*. Ottawa (ON): Health Canada; 2023. Available from: <https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/emergence-xylazine-canada/emergence-xylazine-canada-en.pdf>
24. United Nations Office on Drugs and Crime (UNODC). *World Drug Report 2024*. Vienna: UNODC; 2024. Available from: [https://www.unodc.org/documents/data-and-analysis/WDR\\_2024/WDR24\\_Contemporary\\_issues.pdf](https://www.unodc.org/documents/data-and-analysis/WDR_2024/WDR24_Contemporary_issues.pdf)
25. Ritter A, Barrett L. People who use drugs and the right to health. *Harm Reduction Journal*. 2024;21:215. <https://doi.org/10.1186/s12954-024-01132-5>
26. Mofokeng T. *Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health: Harm Reduction for Sustainable Peace and Development*. New York (NY): United Nations General Assembly; 2024. Available from: <https://documents.un.org/doc/undoc/gen/n24/213/38/pdf/n2421338.pdf>
27. Harm Reduction International. *What is Harm Reduction? A Position Statement from Harm Reduction International*. London (UK): Harm Reduction International; 2018. Available from: <https://www.hri.global/what-is-harm-reduction>
28. Stevens A, Keemink JR, Shirley-Beavan S et al. Overdose prevention centres as spaces of safety, trust and inclusion: a causal pathway based on a realist review. *Drug and Alcohol Review*. 2024;43:1573-91.
29. Brandt L, Hu MC, Liu Y et al. Risk of experiencing an overdose event for patients undergoing treatment with medication for opioid use disorder. *American Journal of Psychiatry*. 2023 May 1;180(5):386-94.
30. Équipe de soutien clinique et organisationnel en dépendance et itinérance (ESCODI) du Centre intégré universitaire de santé et de services sociaux du Centre-Sud-de-l'Île-de-Montréal (CCSMTL). *Québec Clinical Guide on Support for People Living With Opioid Use Disorder*. Montreal (QC): CIUSSS du Centre-Sud-de-l'Île-de-Montréal; 2024. Available from: <https://dependanceitinerance.ca/app/uploads/2024/10/ESCODI-Quebec-clinical-guide-OD-2024.pdf>
31. Slaunwhite A, Min JE, Palis H et al. 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*. 2024;384:e076336.
32. Santo JR T, Brodie Clark, Matt Hickman et al. Association of opioid agonist treatment with all-cause mortality and specific causes of death among people with opioid dependence. *JAMA Psychiatry*. 2021 Sep;78(9):979-93.
33. Gagnon M, Rudzinski K, Guta A et al. Impact of safer supply programs on injection practices: client and provider experiences in Ontario, Canada. *Harm Reduction Journal*. 2023 Jun 28;20(1):81.
34. McMurphy D, Palmer RH. *Assessment of the Implementation of Safer Supply Pilot Projects*. Ottawa (ON): Controlled Substances and Cannabis Branch, Health Canada; 2022. Available from: [https://www.substanceusehealth.ca/sites/default/files/resources/2022-03-safer\\_supply\\_preliminary\\_assessment\\_report\\_en\\_0.pdf](https://www.substanceusehealth.ca/sites/default/files/resources/2022-03-safer_supply_preliminary_assessment_report_en_0.pdf)
35. Bruneau J, Ahamad K, Goyer MÈ et al. Management of opioid use disorders: a national clinical practice guideline. *CMAJ*. 2018;190:E247-57.
36. Fairbairn N, Ross J, Trew M et al. Injectable opioid agonist treatment for opioid use disorder: a national clinical guideline. *CMAJ*. 2019;191(38):E1049-56.
37. Wilson DP, Donald B, Shattock AJ et al. The cost-effectiveness of harm reduction. *International Journal of Drug Policy*. 2015;26(S1):S5-11. Available from: <http://dx.doi.org/10.1016/j.drugpo.2014.11.007>
38. Potier C, Laprèvote V, Dubois-Arber F et al. Supervised injection services: What has been demonstrated? A systematic literature review. *Drug and Alcohol Dependence*. 2014;145:48-68.
39. Konefal S, Maloney-Hall B, Urbanoski K et al. *National Treatment Indicators Report: 2016--2018 Data*. Ottawa (ON): Canadian Centre on Substance Use and Addiction;

2021. Available from: <https://www.ccsa.ca/sites/default/files/2021-01/CCSA-National-Treatment-Indicators-2016-2018-Data-Report-2021-en.pdf>
40. Pilarinos A, Barker B, Nosova E et al. Coercion into addiction treatment and subsequent substance use patterns among people who use illicit drugs in Vancouver, Canada. *Addiction*. 2020 Jan 1;115(1): 97-106.
41. Werb D, Kamarulzaman A, Meacham MC et al. The effectiveness of compulsory drug treatment: A systematic review. *International Journal of Drug Policy*. 2016;28:1-9.
42. Ledberg A, Reitan T. Increased risk of death immediately after discharge from compulsory care for substance abuse. *Drug and Alcohol Dependence*. 2022 Jul 1;236.
43. Bahji A, Leger P, Nidumolu A et al. Effectiveness of involuntary treatment for individuals with substance use disorders: a systematic review. *Canadian Journal of Addiction*. 2023 Dec;14(4):6-18.
44. Canadian Centre for Substance Use and Addiction. *Involuntary Treatment for Severe Substance Use Disorders*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2025 Feb. Available from: <https://ccsa.ca/sites/default/files/2025-02/Involuntary-Treatment-Evidence-Brief-en.pdf>
45. Wood E, Tyndall MW, Montaner JSG et al. Summary of findings from the evaluation of a pilot medically supervised safer injection facility. *CMAJ*. 2006;175(11):1399-404.
46. Hayle S. The politics of harm reduction: comparing the historical development of needle exchange policy in Canada and the UK between 1985 and 1995. *Social History of Alcohol and Drugs*. 2018;32:81-103.
47. Strike C, Miskovic M, Perri M et al. *Best Practice Recommendations for Canadian Programs that Provide Harm Reduction Supplies to People Who Use Drugs and Are At Risk for HIV, HCV, and Other Harms: 2021*. Toronto (ON): Working Group On Best Practice For Harm Reduction Programs In Canada; 2021. Available from: [https://www.catie.ca/sites/default/files/2021-11/3382\\_CATIE\\_CarolStrike\\_BestPracticeRecommendations\\_2021-EN-Final.pdf](https://www.catie.ca/sites/default/files/2021-11/3382_CATIE_CarolStrike_BestPracticeRecommendations_2021-EN-Final.pdf)
48. Ledlie S, Garg R, Cheng C et al. Prescribed safer opioid supply: a scoping review of the evidence. *International Journal of Drug Policy*. 2024 Mar;125:104339.
49. Maghsoudi N, Tanguay J, Scarfone K et al. Drug checking services for people who use drugs: a systematic review. *Addiction*. 2022;117(3): 532-44.
50. Health Canada. *Interactive Map: Canada's Response to the Opioid Overdose Crisis*. Ottawa (ON): Health Canada; 2025. Available from: <https://health.canada.ca/en/health-canada/services/drugs-medication/opioids/responding-canada-opioid-crisis/map.html>
51. Craig M, Notarandrea R. *Accountability for Safe, Quality Care in Bed-Based Addiction Treatment*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2023. Available from: <https://www.ccsa.ca/sites/default/files/2023-05/Accountability-in-Bed-Based-Addiction-Treatment.pdf>
52. Canadian Public Health Association. *Public Health Approaches to the Toxic Drug Crisis*. Ottawa (ON): Canadian Public Health Association; 2025. Available from: <https://www.cpha.ca/toxic-drug-crisis>
53. Office of the Auditor General of Ontario. *Performance Audit: Implementation and Oversight of Ontario's Opioid Strategy*. Toronto (ON): Office of the Auditor General of Ontario; 2024. Available from: [https://auditor.on.ca/en/content/annualreports/arreports/en24/pa\\_ONopiod\\_en24.pdf](https://auditor.on.ca/en/content/annualreports/arreports/en24/pa_ONopiod_en24.pdf)
54. Lewis M. *The Biology of Desire: Why Addiction Is Not a Disease*. Toronto (ON): Anchor Canada; 2016.
55. Taha S. *Best Practices across the Continuum of Care for the Treatment of Opioid Use Disorder*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2018. Available from: <https://www.ccsa.ca/sites/default/files/2019-04/CCSA-Best-Practices-Treatment-Opioid-Use-Disorder-2018-en.pdf>
56. Palmateer N, Kimber J, Hickman M et al. Evidence for the effectiveness of sterile injecting equipment provision in preventing hepatitis C and human immunodeficiency virus transmission among injecting drug users: a review of reviews. *Addiction*. 2010;105(5):844-59.
57. Palmateer N, Hamill V, Bergenstrom A et al. Interventions to prevent HIV and Hepatitis C among people who inject drugs: latest evidence of effectiveness from a systematic review (2011 to 2020). *International Journal of Drug Policy*. 2022;109:103872.
58. Ksobiech K. Return rates for needle exchange programs: a common criticism answered. *Harm Reduction Journal*. 2004 Apr 19;1(1):2.



59. Jakubowski A, Fowler S, Fox AD. Three decades of research in substance use disorder treatment for syringe services program participants: a scoping review of the literature. *Addiction Science and Clinical Practice*. 2023 Dec 1;18(1):40.
60. Jacka B, Larney S, Degenhardt L et al. Prevalence of injecting drug use and coverage of interventions to prevent HIV and hepatitis C virus infection among people who inject drugs in Canada. *American Journal of Public Health*. 2020 Jan;110(1):45-50.
61. Quon A. Experts condemn Sask.'s move to stop providing pipes, limit needle exchanges. *CBC News*. 2024 Jan 18. Available from: <https://www.cbc.ca/news/canada/saskatchewan/sask-drug-policy-1.7087683>
62. Hyshka E, Anderson-Baron J, Karekezi K et al. Harm reduction in name, but not substance: a comparative analysis of current Canadian provincial and territorial policy frameworks. *Harm Reduction Journal*. 2017; 14(1):50.
63. Canadian HIV/AIDS Legal Network. *Sticking Points: Barriers to Access to Needle and Syringe Programs in Canada*. Toronto (ON): Canadian HIV/AIDS Legal Network; 2007.
64. Lynn J. Saskatchewan restricts needle exchange, makes changes to harm reduction funding. *CTV News Saskatoon*. 2024 Jan 18. Available from: <https://saskatoon.ctvnews.ca/saskatchewan-restricts-needle-exchange-makes-changes-to-harm-reduction-funding-1.6731895>
65. Kennedy MC, Karamouzian M, Kerr T. Public health and public order outcomes associated with supervised drug consumption facilities: a systematic review. *Current HIV/AIDS Reports*. 2017;14(5):161-83.
66. Levensgood TW, Yoon GH, Davoust MJ et al. Supervised injection facilities as harm reduction: a systematic review. Vol. 61, *American Journal of Preventive Medicine*. 2021;61:738-49.
67. Andresen MA, Boyd N. A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility. *International Journal of Drug Policy*. 2010; 21(1):70-6.
68. Pinkerton SD. How many HIV infections are prevented by Vancouver Canada's supervised injection facility? *International Journal of Drug Policy*. 2011;22(3): 179-83. Available from: <http://dx.doi.org/10.1016/j.drugpo.2011.03.003>
69. Khair S, Eastwood CA, Lu M et al. Supervised consumption site enables cost savings by avoiding emergency services: a cost analysis study. *Harm Reduction Journal*. 2022 Dec 28;19(1):32.
70. Alberta Health. *Opioid-related Deaths in Alberta in 2017: Review of Medical Examiner Data*. Edmonton (AB): Alberta Health; 2019. Available from: <https://open.alberta.ca/publications/9781460143421>
71. Ontario Drug Policy Research Network, Office of the Chief Coroner for Ontario/Ontario Forensic Pathology Service, Public Health Ontario et al. *Preliminary Patterns in Circumstances Surrounding Opioid-Related Deaths in Ontario during the COVID-19 Pandemic*. Toronto (ON): Public Health Ontario; 2020. Available from: <https://www.publichealthontario.ca/-/media/documents/o/2020/opioid-mortality-covid-surveillance-report.pdf?la=en>
72. BC Coroners Service. *Illicit Drug Toxicity Deaths in BC Knowledge Update: Mode of Consumption*. Burnaby (BC): BC Coroners Service; 2021. Available from: [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](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)
73. Rammohan I, Gaines T, Scheim A et al. Overdose mortality incidence and supervised consumption services in Toronto, Canada: an ecological study and spatial analysis. *The Lancet Public Health*. 2024 Feb 1;9(2): e79-87.
74. Bayoumi AM, Wu M, Pogacar F et al. *Estimating the Effects of Closing Supervised Consumption Sites in Toronto*. Toronto (ON): MAP Centre for Urban Health Solutions; 2024. Available from: <https://odprn.ca/wp-content/uploads/2024/11/Estimating-the-Effects-of-Closing-Supervised-Consumption-Sites-in-Toronto.pdf>
75. Mocanu V, Viste D, Rioux W et al. Accessibility gaps of physical supervised consumption sites in Canada motivating the use of overdose response technology/ phone based virtual overdose response services: a retrospective cohort study. *The Lancet Regional Health - Americas*. 2024 Jun 1;34:100770.
76. Rioux W, Enns B, Jackson J et al. A cost benefit analysis of a virtual overdose monitoring service/mobile overdose response service: the national overdose response service. *Substance Abuse: Treatment, Prevention, and Policy*. 2023 Dec 1;18(1):57.



77. Rioux W, Enns B, Ghosh SM. Virtual overdose monitoring services/mobile overdose response services: estimated number of potentially averted drug poisoning fatality events by various telephone and digital-based overdose prevention/harm reduction services in North America. *Frontiers in Public Health*. 2023 Oct 19;11:1242795.
78. Rioux W, Taplay P, Morris-Miller L et al. Implementing Canada's first national virtual phone based overdose prevention service: lessons learned from creating the National Overdose Response Service (NORS). *Harm Reduction Journal*. 2024 Dec 1;21(1):102.
79. Viste D, Rioux W, Cristall N et al. Association of drug overdoses and user characteristics of Canada's national mobile/virtual overdose response hotline: the National Overdose Response Service (NORS). *BMC Public Health*. 2023 Sep 27;23(1):1869.
80. McDonald R, Strang J. Are take-home naloxone programmes effective? Systematic review utilizing application of the Bradford Hill criteria. *Addiction*. 2016; 111(7):1177-87.
81. Razaghizad A, Windle SB, Filion KB et al. The effect of overdose education and naloxone distribution: an umbrella review of systematic reviews. *American Journal of Public Health*. 2021;111(8):1516-17.
82. Fischer LS, Asher A, Stein R et al. Effectiveness of naloxone distribution in community settings to reduce opioid overdose deaths among people who use drugs: a systematic review and meta-analysis. *BMC Public Health*. 2025 Mar 25;25(1):1135.
83. Coffin PO, Sullivan SD. Cost-effectiveness of distributing naloxone to heroin users for lay overdose reversal. *Annals of Internal Medicine*. 2013 Jan 1;158(1):1-9.
84. Tse WC, Djordjevic F, Borja V et al. Does naloxone provision lead to increased substance use? A systematic review to assess if there is evidence of a 'moral hazard' associated with naloxone supply. *International Journal of Drug Policy*. 2022 Feb;100:103513.
85. Townsend T, Blostein F, Doan T et al. Cost-effectiveness analysis of alternative naloxone distribution strategies: first responder and lay distribution in the United States. *International Journal of Drug Policy*. 2020 Jan;75:102536.
86. Crabtree A, Masuda JR. Naloxone urban legends and the opioid crisis: What is the role of public health? *BMC Public Health*. 2019;19(1):670.
87. Moustaqim-Barrette A, Elton-Marshall T, Leece P et al. *Environmental Scan: Naloxone Access and Distribution in Canada*. Vancouver (BC): Canadian Research Initiative in Substance Matters; 2019. Available from: [https://crism.ca/wp-content/uploads/2019/06/CRISM\\_Enviro-Scan\\_Final-Draft\\_June18.pdf](https://crism.ca/wp-content/uploads/2019/06/CRISM_Enviro-Scan_Final-Draft_June18.pdf)
88. McCrae K, Tobias S, Stunden C. *Drug Checking Operational Technician Manual*. Vancouver (BC): British Columbia Centre on Substance Use; 2019. <https://www.bccsu.ca/wp-content/uploads/2019/03/BCCSU-Technician-Manual-March-2019.pdf>
89. Moran L, Ondocsin J, Outram S et al. How do we understand the value of drug checking as a component of harm reduction services? A qualitative exploration of client and provider perspectives. *Harm Reduction Journal*. 2024 Dec 1;21(1):92.
90. Canadian Centre on Substance Use and Addiction. *An Environmental Scan of Drug-Checking Services in Canada: Final Report*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2024. Available from: <https://www.ccsa.ca/sites/default/files/2024-12/Drug-Checking-Environmental-Scan-2024-en.pdf>
91. Tobias S, Ferguson M, Palis H et al. Motivators of and barriers to drug checking engagement in British Columbia, Canada: findings from a cross-sectional study. *International Journal of Drug Policy*. 2024 Jan 1; 123:104290.
92. Gomes T, Kolla G, McCormack D et al. Clinical outcomes and health care costs among people entering a safer opioid supply program in Ontario. *CMAJ*. 2022 Sep 19; 194(36):E1233-42.
93. Haines M, O'Byrne P. Nurse-led safer opioid supply and HIV pre-exposure prophylaxis: a novel pilot project. *Therapeutic Advances in Infectious Disease*. 2022;9: 204993612210914.
94. Kolla G, Fajber K. *Safer Opioid Supply Program Evaluation: A Comparison of SOS Client Outcomes from 2022 and 2023*. London (ON): Substance Use Health Network; 2023 Sep. Available from: <https://www.substanceusehealth.ca/resource/safer-opioid-supply-program-evaluation-comparison-sos-client-outcomes-2022-and-2023>
95. Kolla G, Long C, Perri M et al. *Safer Opioid Supply Program: Preliminary Report*. London (ON): London InterCommunity Health Centre; 2021. Available from:

- <https://lihc.on.ca/wp-content/uploads/2022/01/2021-SOS-Evaluation-Full.pdf>
96. Min JE, Guerra-Alejos BC, Yan R et al. Opioid coprescription through risk mitigation guidance and opioid agonist treatment receipt. *JAMA Network Open*. 2024 May 15;7(5):E2411389.
97. Giang K, Charlesworth R, Thulien M et al. Risk mitigation guidance and safer supply prescribing among young people who use drugs in the context of COVID-19 and overdose emergencies. *International Journal of Drug Policy*. 2023 May 1;115.
98. McNeil R, Fleming T, Mayer S et al. Implementation of safe supply alternatives during intersecting COVID-19 and overdose health emergencies in British Columbia, Canada, 2021. *American Journal of Public Health*. 2022;112(52):S151-8.
99. Gomes T, McCormack D, Kolla G et al. Comparing the effects of prescribed safer opioid supply and methadone in Ontario, Canada: a population-based matched cohort study. *The Lancet Public Health*. 2025;10(5): e412-21.
100. Glegg S, McCrae K, Kolla G et al. "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*. 2022;106:103742.
101. BC Coroners Service Death Review Panel. *BC Coroners Service Death Review Panel: An Urgent Response to a Continuing Crisis*. Burnaby (BC): BC Coroners Service; 2023. [https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/an\\_urgent\\_response\\_to\\_a\\_continuing\\_crisis\\_report.pdf](https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/an_urgent_response_to_a_continuing_crisis_report.pdf)
102. BC Centre for Disease Control. *Unregulated Drug Poisoning Emergency Dashboard*. Vancouver (BC): BC Centre for Disease Control; 2024. Available from: <http://www.bccdc.ca/health-professionals/data-reports/substance-use-harm-reduction-dashboard>
103. Pauly B, Kurz M, Dale LM et al. Implementation of pharmaceutical alternatives to a toxic drug supply in British Columbia: a mixed methods study. *Journal of Substance Use and Addiction Treatment*. 2024;161:209341.
104. Yakovenko I, Mukaneza Y, Germé K et al. Management of opioid use disorder: 2024 update to the national clinical practice guideline. *CMAJ*. 2024 Nov 12;196(38): E1280-90.
105. British Columbia Centre on Substance Use. *Guidance for Injectable Opioid Agonist Treatment*. Vancouver (BC): British Columbia Centre on Substance Use; 2021. Available from: [https://www.bccsu.ca/wp-content/uploads/2021/07/BC\\_iOAT\\_Guideline.pdf](https://www.bccsu.ca/wp-content/uploads/2021/07/BC_iOAT_Guideline.pdf)
106. Platt L, Minozzi S, Reed J et al. Needle syringe programmes and opioid substitution therapy for preventing hepatitis C transmission in people who inject drugs. *Addiction*. 2018;113:545-63.
107. MacArthur GJ, Minozzi S, Martin N et al. Opiate substitution treatment and HIV transmission in people who inject drugs: systematic review and meta-analysis. *BMJ*. 2012;345(7879):e5945.
108. Priest KC, Gorfinkel L, Klimas J et al. Comparing Canadian and United States opioid agonist therapy policies. *International Journal of Drug Policy*. 2019 Dec 1; 74:257-65.
109. Iacono A, Wang T, Tadrous M et al. Characteristics, treatment patterns and retention with extended-release subcutaneous buprenorphine for opioid use disorder: a population-based cohort study in Ontario, Canada. *Drug and Alcohol Dependence*. 2024 Jan 1;254:111032.
110. Pijl EM, Alraja A, Duff E et al. Barriers and facilitators to opioid agonist therapy in rural and remote communities in Canada: an integrative review. *Substance Abuse: Treatment, Prevention, and Policy*. 2022;17(1):62.
111. Yazdani K, Dolguikh K, Ye M et al. Characterizing opioid agonist therapy uptake and factors associated with treatment retention among people with HIV in British Columbia, Canada. *Preventive Medicine Reports*. 2023;35:102305.
112. Socías ME, Dong H, Wood E et al. Trajectories of retention in opioid agonist therapy in a Canadian setting. *International Journal of Drug Policy*. 2020 Mar 1; 77:102696.
113. Eydt E, Glegg S, Sutherland C et al. Service delivery models for injectable opioid agonist treatment in Canada: 2 sequential environmental scans. *CMAJ Open*. 2021;9(1):E115-24.
114. McEachern J, Ahamad K, Nolan S et al. A needs assessment of the number of comprehensive addiction care physicians required in a Canadian setting. *Journal of Addiction Medicine*. 2016 Aug 1;10(4):255-61.

115. George TP, Welsh L, Franchuk SL et al. Why integrating medications and psychosocial interventions is important to successfully address the opioid crisis in Canada. *Canadian Journal of Psychiatry*. 2022 Mar 1;67(3):176-8.
116. Oviedo-Joekes E, Brissette S, Marsh DC et al. Diacetylmorphine versus methadone for the treatment of opioid addiction. *New England Journal of Medicine*. 2009;361(8):777-86.
117. British Columbia Centre on Substance Use. *Stimulant Use Disorder Practice Update*. Vancouver (BC): British Columbia Centre on Substance Use; 2022. p. 1-39. Available from: [https://www.bccsu.ca/wp-content/uploads/2022/06/Stimulant-Use-Disorder-Practice-Update\\_June2022.pdf](https://www.bccsu.ca/wp-content/uploads/2022/06/Stimulant-Use-Disorder-Practice-Update_June2022.pdf)
118. Ciccarone D, Shoptaw S. Understanding stimulant use and use disorders in a new era. *Medical Clinics of North America*. 2022;106:81-97. <https://doi.org/10.1016/j.mcna.2021.08.010>
119. Ronsley C, Nolan S, Knight R et al. Treatment of stimulant use disorder: a systematic review of reviews. *PLoS ONE*. 2020;15(6):e0234809. <http://dx.doi.org/10.1371/journal.pone.0234809>
120. British Columbia Centre on Substance Use. *ASCME Clinical Trial*. Vancouver (BC): British Columbia Centre on Substance Use. Available from: <https://www.bccsu.ca/ascme/>
121. Dunham K, Mathew M, Cheema K et al. *Withdrawal Management Services Toolkit*. Toronto (ON): META:PHI; 2024 Jan. Available from: <https://www.metaphi.ca/wp-content/uploads/ToolkitWMS.pdf>
122. Meister S, Maloney-Hall B, Urbanoski K et al. *Withdrawal Management Services in Canada: The National Treatment Indicators Report: 2015-2016 Data*. Ottawa (ON): Canadian Centre on Substance Use and Addiction; 2019. Available from: <https://www.ccsa.ca/sites/default/files/2019-04/CCSA-National-Treatment-Indicators-Report-2019-en.pdf>
123. Farhoudian A, Razaghi E, Hooshyari Z et al. Barriers and facilitators to substance use disorder treatment: an overview of systematic reviews. *Substance Abuse: Research and Treatment*. 2022;16:11782218221118462.
124. Hodgins DC, Budd M, Czukar G et al. Treatment of opioid use disorder in Canadian psychosocial addiction programs: a national survey of policy, attitudes, and practice. *Canadian Journal of Psychiatry*. 2022 Aug 1; 67(8):638-47.
125. Crawley M. Forcing people into drug treatment is on the political agenda. Here's what the evidence says. *CBC News*. 2024 Oct 10. Available from: <https://www.cbc.ca/news/health/involuntary-addiction-treatment-research-evidence-1.7377257>
126. Addictions and Mental Health Ontario. *No Time to Wait: Budget Submission 2022*. Toronto (ON): Addictions and Mental Health Ontario; 2022. Available from: [https://amho.ca/wp-content/uploads/2023/10/AMHO\\_BudgetSubmission\\_2022\\_FINAL.pdf](https://amho.ca/wp-content/uploads/2023/10/AMHO_BudgetSubmission_2022_FINAL.pdf)



[www.catie.ca](http://www.catie.ca)

 /CATIEinfo

## DISCLAIMER

CATIE strengthens Canada's response to HIV and hepatitis C by bridging research and practice. We connect healthcare and community-based service providers with the latest science, and promote good practices for prevention and treatment programs.

CATIE endeavours to provide up-to-date and accurate information at the time of publication, but it should not be considered medical advice. Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner. CATIE resources may contain descriptions or depictions of sex, sexuality or drug use, with the goal of promoting public health. Any opinions expressed herein may not reflect the policies or opinions of CATIE or any partners or funders.

Production of this document has been made possible through a financial contribution from Health Canada's Substance Use and Addictions Program. The views expressed herein do not necessarily represent the views of Health Canada.

## PERMISSION TO REPRODUCE

*This document is copyrighted. It may be reprinted and distributed in its entirety for non-commercial purposes without prior permission, but permission must be obtained to edit its content. The following credit must appear on any reprint: This information was provided by the Canadian AIDS Treatment Information Exchange (CATIE). For more information, contact CATIE at [info@catie.ca](mailto:info@catie.ca).*

CATIE statements are available for free at [www.catie.ca](http://www.catie.ca)