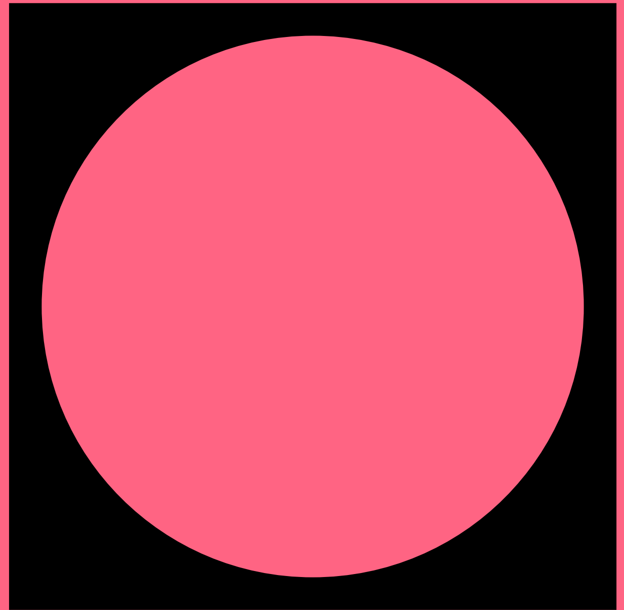
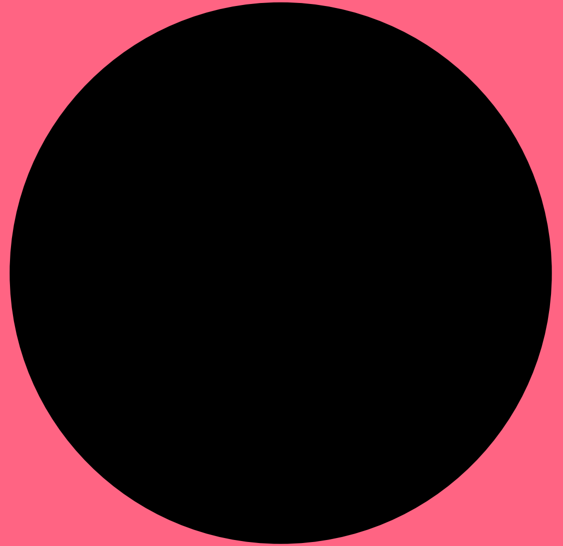
REGIONAL OVERVIEW: NORTH AMERICA



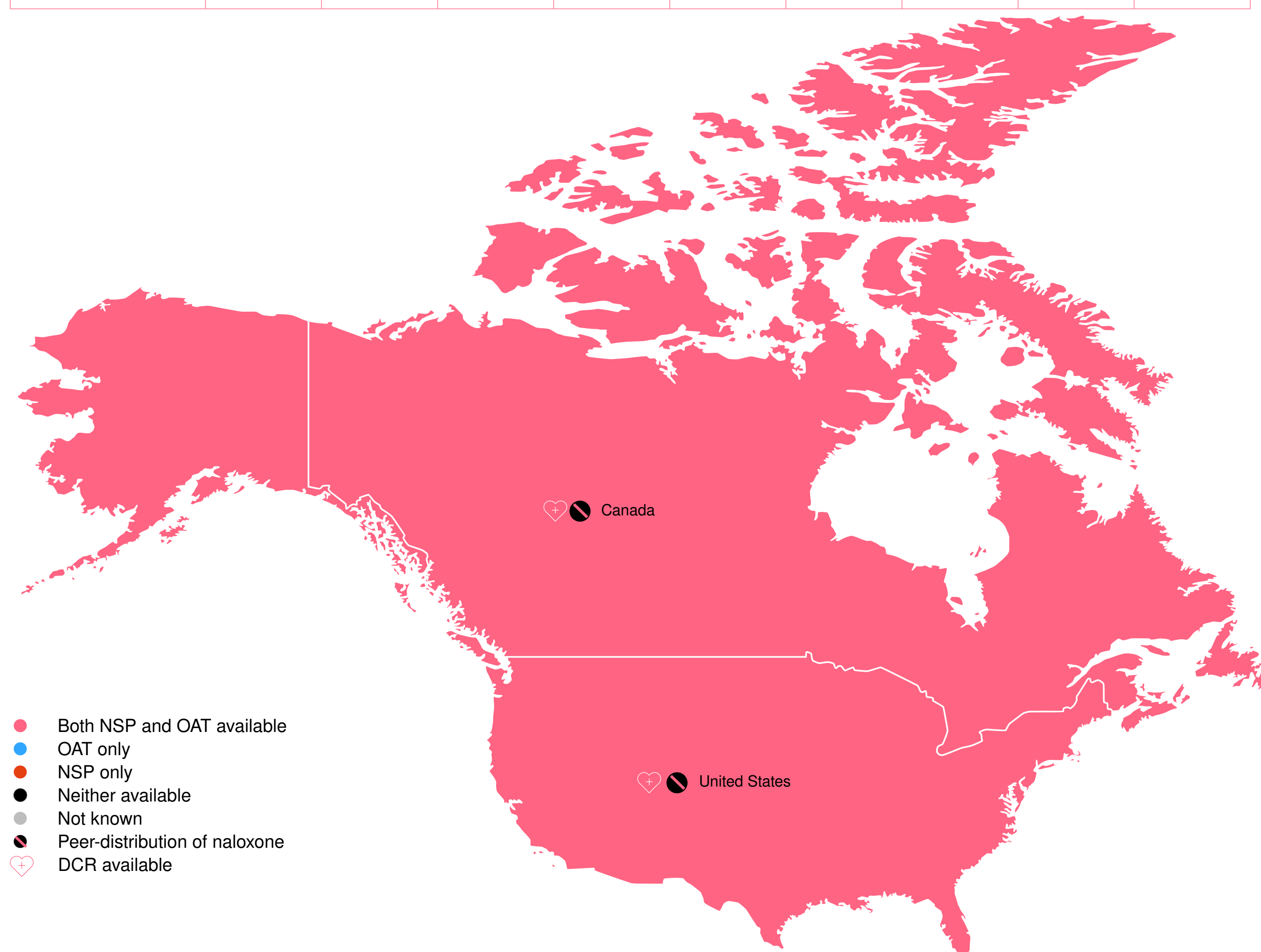


THE GLOBAL STATE
OF HARM REDUCTION 2022

HARM REDUCTION
INTERNATIONAL

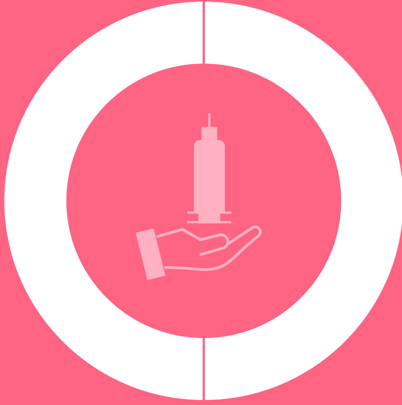
TABLE 7 EPIDEMIOLOGY OF HIV AND VIRAL HEPATITIS, AND HARM REDUCTION RESPONSES IN NORTH AMERICA

Country/territory	People who inject drugs[a]	HIV prevalence among people who inject drugs (%)[a]	Hepatitis C (anti-HCV) prevalence among people who inject drugs (%)[a]	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%)[a]	Harm reduction responses				
					NSP[b]	OAT[c]	Peer distribution of naloxone[d]	DCR[e]	Safer smoking equipment[f]
Canada	130,000[2]	5.8	38.6	nd	✓[3]	✓ B F H M[3]	✓[3]	✓40[g4]	✓[3]
United States of America	3,694,500[5]	6.1	53.5	4.8	✓ >433[6]	✓ M B[7]	✓[7]	✓2[7]	✓[7]



a Unless otherwise stated, data is from Degenhardt et al (under review).[1]
b At least one needle and syringe programme operational in the country or territory, and the number of programmes (where data is available)
c At least one opioid agonist therapy programme operational in the country or territory, and the medications available for therapy. B=buprenorphine, F=fentanyl, H=heroin/diamorphine, M=methadone.
d At least one naloxone distribution programme that engages people who use drugs (peers) in the distribution of naloxone and naloxone training, and facilitates secondary distribution of naloxone between peers.
e At least one drug consumption room (DCR) (also known as safe consumption sites among other names) operational in the country or territory, and the number of facilities.
f At least one programme in the country or territory distributing safer smoking equipment to people who use drugs.
g This includes one prison DCR in Drumheller, Alberta.

NSPs, OAT AND DCRs SINCE 2020

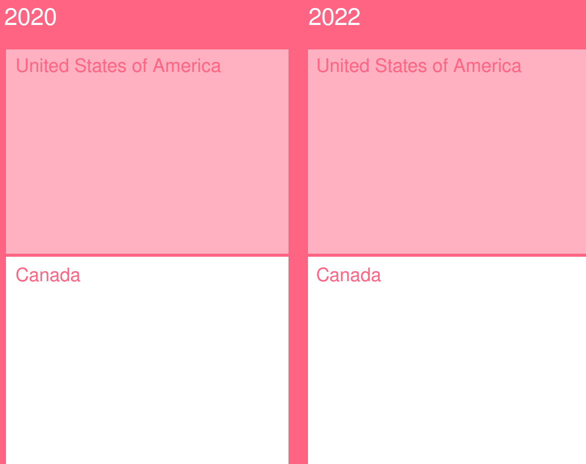


2 countries (100%) in North America provide **needle and syringe programmes** (no change from 2020)

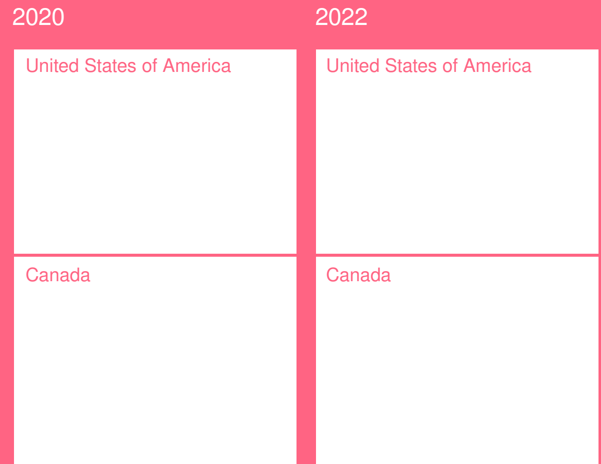
2 countries (100%) in North America provide **opioid agonist therapy** (no change from 2020)

2 countries in North America provides **drug consumption rooms** (+1 since 2020, United States)

HARM REDUCTION IN PRISONS



1 country in North America **provides needle and syringe programmes** in prisons (no change from 2020)



Both countries in North America **provide opioid agonist therapy** in prisons (no change from 2020)

IN THE UNITED STATES, 107,270 PEOPLE DIED FROM DRUG OVERDOSES IN 2021.

REGIONAL OVERVIEW

AUTHORS:
DEREK FRASURE and **SAM SHIRLEY-BEAVAN**

INTRODUCTION

Developments in North America have, once again, taken place in the context of record-breaking drug overdose deaths in both Canada and the United States.

In the United States, 107,270 people died from a drug overdose in 2021, an increase of 60% compared with 2018 (when 67,367 people died).[8] Of these deaths, 75% (80,725) involved opioids, and 88% of those involved synthetic opioids such as fentanyl.[8] Almost a quarter of deaths (23%; 24,605) involved cocaine.[8] More than one million Americans have now died from drug overdoses since 1999.[8] In Canada, in the first year of the COVID-19 pandemic (April 2020 to March 2021), overdose deaths almost doubled compared with the previous 12 months (from 3,747 to 7,362).[9]

Since 2020, this has contributed to an acceleration of harm reduction programmes.

In the United States, President Biden and the U.S. Office of National Drug Control Policy both named harm reduction as a priority— a first in the country. The Biden administration also committed to an investment of USD 30 million over 3 years from 2022 to 2025.[10] While funding awards have gone primarily to organisations on the East and West Coasts, and to some groups with little harm reduction experience, this is a significant boost to harm reduction programming.[7,11–25]

Another concrete example of this new era in the United States is the opening of the country's first two government-authorised drug consumption rooms (DCRs) in November 2021, both in New York City (operated by OnPoint NYC, and known officially as Overdose Prevention Centers), and the passing of legislation authorising a DCR in Rhode Island.[7,12,13,25–30]

In Canada, civil society actors report the increase in the availability of 'safer supply', which is a significant

positive development.[31–39] Since 2021, Canada's federal government has demonstrated support for this, and the provincial government of British Columbia has provided guidelines for physicians prescribing regulated drugs as an alternative to the illicit supply.[40,41] In British Colombia, fentanyl has been available as a paid prescription since April 2022, although accessibility is limited.[3,35]

In both Canada and the United States, local movements towards decriminalising drugs have gained support. In late 2020, the state of Oregon decriminalised small amounts of all drugs for personal use. Efforts to decriminalise simple drug possession are also underway in other states, provinces and cities in both the United States and Canada.[3,12,29,31,32,35–37,42,43] From January 2023, the province of British Columbia will decriminalise possession of small amounts of drugs for personal use.[44] However, neither country's federal government has formally endorsed decriminalisation. In Canada, a bill that would provide law enforcement options to divert people to services rather than charge them for simple drug possession is in front of the federal parliament at the time of writing (August 2022).[31,45]

Nevertheless, advances in harm reduction in the United States have been met with a significant backlash from conservative figures, who are particularly critical of the possibility that federal funds would be used for the distribution of safer smoking equipment. Some states continue to prevent lawful needle and syringe programmes (NSPs) from operating, despite high levels of HIV infections and overdoses. Other states criminalise drug paraphernalia including syringes and safer smoking and snorting supplies (see Table 7.1, page 112). In California, the governor vetoed a bill permitting overdose prevention sites that was passed in the legislature, falsely asserting that there was no real plan for the efforts.[46] In Canada, areas run by politically conservative parties have substantially less availability of harm reduction services. For example, the provincial government in Alberta withdrew funding from a DCR in Lethbridge, leading to its closure,[3,33,36,40,47] and in Saskatchewan the provincial government continues to refuse to fund Saskatoon's only DCR.[33,39] The site continues to operate, thanks in part to donations from the community.[48,49]

TABLE 7.1 STATE-BY-STATE ACCESS TO HARM REDUCTION IN THE UNITED STATES

State	Needle and syringe programmes[a 6]	Is possession of syringes criminalised by drug paraphernalia laws?[b 91]	Licensed opioid treatment programmes[c 93]	Licensed drug consumption rooms
Alabama	0	Yes	23	0
Alaska	3	No	6	0
Arizona	8	Yes	68	0
Arkansas	2	Yes	6	0
California	65[25]	No[25]	168	0
Colorado	12	Yes, but NSP clients exempt	30	0
Connecticut	10	No	51	0
Delaware	1[94]	Yes, but NSP clients exempt	19	0
Florida	6[93]	Yes, but NSP clients exempt	95	0
Georgia	3	Yes	76	0
Hawaii	1	Yes, but NSP clients exempt	5	0
Idaho	4	Yes	6	0
Illinois	11	Yes, but NSP clients exempt	89	0
Indiana	10	No	24	0
Iowa	2	Yes	8	0
Kansas	0	Yes	9	0
Kentucky	32	Yes, but NSP clients exempt	31	0
Louisiana	5	Yes	10	0
Maine	6	Yes, but NSP clients exempt	12	0
Maryland	6	Yes, but NSP clients exempt	97	0
Massachusetts	15	No	106	0
Michigan	24	No	50	0
Minnesota	12	No	17	0
Mississippi	0	Yes	4	0
Missouri	2	Yes	18	0
Montana	6	Yes	4	0
Nebraska	0	Yes	3	0
Nevada	2	No	16	0
New Hampshire	9	No	11	0
New Jersey	3	Yes, but NSP clients exempt	63	0
New Mexico	2	Yes, but NSP clients exempt	21	0
New York	28[24]	Yes, but NSP clients exempt	131	2[30]
North Carolina	48[94]	Yes, but NSP clients exempt	86	0
North Dakota	4	Yes, but NSP clients exempt	4	0
Ohio	17	Yes, but NSP clients exempt	112	0
Oklahoma	2	Yes	21	0
Oregon	14	No	24	0

a This is the number of NSPs registered with the North American Syringe Exchange Network (except where noted otherwise). This directory is not intended to be exhaustive but gives an indication of the level of service availability in each state.
b Decriminalisation of syringe possession does not always protect people from prosecution for drug residues found in those syringes.
c These are the only programmes licensed to dispense methadone in the United States. People may also be able to access buprenorphine through a prescribing physician.

State	Needle and syringe programmes[a 6]	Is possession of syringes criminalised by drug paraphernalia laws?[b 91]	Licensed opioid treatment programmes[c 93]	Licensed drug consumption rooms
Pennsylvania	7	Yes	105	0
Rhode Island	2	No	22	0
South Carolina	4	No	27	0
South Dakota	0	Yes	1	0
Tennessee	10	Yes, but NSP clients exempt	23	0
Texas	8	Yes	99	0
Utah	6	Yes, but NSP clients exempt	18	0
Vermont	3	Yes, but NSP clients exempt	7	0
Virginia	6	Yes, but NSP clients exempt	46	0
Washington	30	Yes, but NSP clients exempt	35	0
West Virginia	8	Yes, but NSP clients exempt	9	0
Wisconsin	14	No	24	0
Wyoming	0	Yes	0	0
Washington DC	4	nd	5	0

a This is the number of NSPs registered with the North American Syringe Exchange Network (except where noted otherwise). This directory is not intended to be exhaustive but gives an indication of the level of service availability in each state.
b Decriminalisation of syringe possession does not always protect people from prosecution for drug residues found in those syringes.
c These are the only programmes licensed to dispense methadone in the United States. People may also be able to access buprenorphine through a prescribing physician.

NEEDLE AND SYRINGE PROGRAMMES (NSP), OPIOID AGONIST THERAPY (OAT) AND NALOXONE

Since 2020, community and civil society observers in the United States consider that service availability has generally increased for NSPs, OAT and take-home naloxone programmes. However, this is highly variable by jurisdiction (see Table 7.1, page 112). In July 2021, Oklahoma explicitly provided for NSP in law for the first time, but drug paraphernalia laws that criminalise syringe possession remain in place.[18] In six of the United States, there are no government-sanctioned NSPs at all (Alabama, Kansas, Mississippi, Nebraska, South Dakota and Wyoming; see Table 7.1, page 112). In December 2021, the White House issued a model law on NSPs, with the aim of increasing accessibility. Notably, this recommends that states end the criminalisation of syringes as drug paraphernalia.[55]

In Canada, civil society report a diversification of the organisations implementing harm reduction programmes over the last two years, particularly NSPs. Women's shelters, community hubs, shelters and First Nations organisations are increasingly promoting harm reduction in their own programmes.[31,40,56] Canada continues to have more drug consumption rooms than any other country with 39 federally regulated sites in the community and one site in a federal prison, in addition to numerous Overdose Prevention Sites (low-barrier sites typically set up by volunteers and community-based organisations to operate temporarily to respond to acute crises).[4]

Since December 2020, all Medicaid programmes (government-supported health insurance) in the United States are required to cover methadone, which is greatly increasing access to OAT.[7,12,14,17,26,57,58] However, methadone remains heavily regulated and is only available in licensed opioid treatment programmes (see Table 7.1, page 112).[7,24,28,59,60] Buprenorphine can be prescribed by a doctor, but this relies on finding a physician willing and able to do so.[7] There is a racial divide when it comes to who has access to which treatment, with methadone more available in counties where Black and Brown people are unlikely to interact with white people, while buprenorphine is more available in counties where white residents are unlikely to interact with Black or Brown residents.[61]

Harm reduction services in Canada and the United States have continued to experience disruptions related to the COVID-19 pandemic. Limited hours and the temporary or permanent closure of services have been detrimental to service availability and accessibility. Several service providers report that the loss of physical contact with clients has made human connection more difficult, robbing programmes of an important part of their work.[18,35,38,60] In some cases, harm reduction was deprioritised in favour of the public health response to the COVID-19 pandemic.[17,62] In some jurisdictions, select services were protected as essential health services during lockdowns (such as NSPs in Manitoba, Canada) while others were not, including DCRs in Canada.[63] The COVID-19 pandemic also brought some positive changes to harm reduction services, including the expansion of take-home and mail-order OAT and naloxone in both countries, and initiating buprenorphine treatment based on telephone appointments.[7,23,26,29,53,60] However, some of these COVID-19-related rule changes, particularly around take-home methadone, are already being rolled back by clinics as the COVID-19 pandemic subsides in the region.[52]

Stigma, and the lack of services in some jurisdictions and rural areas, remain significant barriers to all harm reduction services in the region. People who are migrants, women, Black, Brown, Hispanic and Indigenous people are particularly affected by stigma.[7,12,14,16,19,21,23,53,54,60] Even in some urban areas where harm reduction is operational, accessibility is limited. For example, Saskatoon, Canada has just two NSPs for a city of 320,000 people.[38] Evolving patterns of drug use also requires services to adapt to remain relevant to the people they serve. For example, increased use of fentanyl in both countries means previously standard doses of methadone and buprenorphine may not be appropriate or adequate OAT for some clients.[3,63] The fact that people are

using benzodiazepines and opioids together may have an impact on the effectiveness of naloxone as an overdose response because this combination of drugs can stop people becoming fully responsive after receiving naloxone; this makes safer supply efforts even more urgent (see Spotlight: Toxic drug supply page 116).[7,63]

In prisons, access to harm reduction services is severely limited in both countries. NSPs are operational in just nine federal prisons in Canada, and none in the United States.[3,12,14,36,54] In both countries, significant opposition from conservative politicians, private interests and prison agencies and unions prevents wider implementation.[3,12,14,24,36,38,43,54,60,63] Even where it is available in Canada, the application to participate in an NSP requires the approval of the prison warden; there is no anonymity for clients and uptake is exceptionally low.[3,35] OAT is available in fewer than 1% of prisons in the United States,[7] and OAT in prison is often excluded from insurance coverage.[12,54] However, the United States Department of Justice recently released guidance detailing how the failure to provide OAT in prisons and jails violates federal law.[64] This, along with several successful lawsuits in various jurisdictions, may lead to more closed settings providing OAT in the near future.[52]

STIMULANTS AND NON-INJECTED DRUG USE

In both Canada and the United States, access to harm reduction for people who use stimulants has increased, but it remains small. Availability of safer smoking equipment has increased, often distributed by NSPs. These services are aimed at the increasing number of people who are smoking fentanyl as well as people who smoke crack cocaine and methamphetamines.[7,12,35,36,40] In the United States, safer smoking equipment became a political lightning rod in early 2022 (see Spotlight on 'responding to a toxic drug supply', page 116 for highlight in 115); unfortunately, a particularly potent and highly racialised stigma exists against people who use crack cocaine. Pipe distribution remains illegal in many areas, and federal money cannot be used to supply crack pipes.[7,12,65] The prescription of stimulants (sometimes known as pharmacotherapy, which follows similar principles to OAT) remains officially unavailable in the United States, although there are some reports that the practice takes place 'off-label'.[24] In Canada, the federal government has indicated support for prescribing stimulants to people who use drugs,[40] but a lack of formalised programmes, and therefore a lack of data on effectiveness, hinders the development of such services.[32,33] Smoking drugs is not permitted in the majority of Canadian DCRs, denying people who smoke drugs access to a key harm reduction programme.

"In both Canada and the United States, access to harm reduction for people who use stimulants has increased, but it remains small. Availability of safer smoking equipment has increased, often distributed by NSPs. These services are aimed at the increasing number of people who are smoking fentanyl as well as people who smoke crack cocaine and methamphetamines."

SPOTLIGHT

RESPONDING TO A TOXIC DRUG SUPPLY

North America has a highly toxic drug supply. Benzodiazepines and synthetic opioids (including carfentanil and fentanyl) are frequently found in samples of both opioids and stimulants where they are not expected. There is a further emerging issue of contamination with xylazine, a tranquiliser which may cause central nervous system depression and skin ulcers.[66] Fentanyl is also increasingly used intentionally, particularly in Canada, requiring adaptation from OAT and overdose response services.[67] This toxic drug supply has had an immense impact on overdose rates in North America. To make matters worse, the COVID-19 pandemic has dramatically escalated a crisis of overdose deaths that has been ongoing in the region since the late 1990s.

Alongside efforts to decriminalise and regulate drugs, harm reductionists have three major tools in the response to this toxic supply. The first is safer supply. This means ensuring that people do not receive contaminated substances in the first place. The second is drug checking, so that people can check if their drugs contain contaminants. The third is an effective overdose response.

Safer supply is increasingly available in Canada, although the practice is concentrated on the safer supply of opioids and not stimulants, despite reports of contaminated stimulant supply. Many service providers report that ‘traditional’ OAT using methadone or buprenorphine is insufficient for, or does not meet, the needs of clients. Fentanyl is rarely available as OAT in Canada, despite being widely used in the community.[63] In a first-of-its-kind programme in Vancouver, which is based on feedback from the community, PHS Community Services provides fentanyl via prescription.[68] Community activism has also been an important part of safer supply advocacy and implementation. For example, in July 2021 the Drug User Liberation Front (DULF) and Vancouver Area Network of Drug Users (VANDU) held a protest during which they handed out tested heroin, methamphetamine and cocaine to promote the concept of safer supply.[69] Since 2020, the federal government in Canada has indicated support for safer supply programmes.[70] However, this support has been insufficient to achieve widespread access. Still only a few prescribers are willing to prescribe diamorphine (pharmaceutical heroin) or fentanyl to people who use opioids,[3,63] despite clear guidelines endorsed by the federal government.[71,72]

Drug checking, where drug samples are tested with portable or laboratory machinery to determine what they contain, is available in both countries as onsite, walk-in and mail-in services. Checking in real time is rarely available, and access remains limited, despite an increase in provision since 2020. Legal and funding barriers often make it difficult to expand access. For example, in Canada, for drug checking services to operate without the threat of criminal charges, they are required to apply for exemption from federal drug laws, which is a slow and bureaucratic process.[3,40,63] However, drug checking is increasingly present in Canadian DCRs (which already have the necessary exemptions to handle illicit substances), particularly in British Columbia.

To combat the specific challenge of fentanyl contamination, many harm reduction organisations in the region provide testing strips capable of identifying the presence of fentanyl in a sample. In Canada, fentanyl testing strips are widely available in DCRs and drug checking facilities. In the United States, federal funds can now be used to purchase fentanyl testing strips. In both countries, fentanyl testing strips are highly acceptable to people who use drugs and can play an important role in reducing harms, particularly for people who use stimulants[73,74], although their usefulness is limited in contexts where fentanyl is the predominant opioid of choice or where virtually all opioids purchased contain fentanyl or an analogue.

Naloxone remains a primary tool in overdose response. Take-home naloxone, as well as peer-led distribution programmes, operate in both countries with support from the federal government and private donors. In Canada, there is concern from civil society that the federal government may overemphasise naloxone accessibility as a panacea for the overdose crisis at the expense of other parts of the response.[38] Even so, while access is high in many cities, rural areas are underserved.[40] Reaching all relevant populations can also be a challenge for naloxone distribution. Civil society actors report that some people, notably those who only use cocaine, believe they do not need naloxone, despite the documented presence of opioid contaminants in the cocaine supply.[31] This may be associated with stigma towards people who inject opioids.

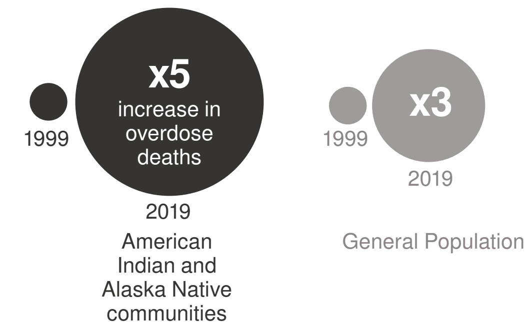
In the United States, naloxone accessibility has also increased since 2020. A broad consensus on the need for naloxone has led to more political and financial support from both state and federal governments.[23,53] However, supply chain shortages in 2021 have caused higher prices, reduced availability, and increased overdose deaths.[21,23,29,59,75] In response, in autumn 2021 civil society organisation Remedy Alliance: For the People negotiated the supply of low cost naloxone with pharmaceutical manufacturers, and is making the medication available to harm reduction organisations across the country.[75] However, naloxone provision in the United States still does not come close to saturation, as no states currently meet need.[76]

Naloxone is not the only response in cases of overdose. Harm reductionists have long advocated ‘never using alone’ as a mitigation against overdose, and as a way of ensuring medical attention can be sought. DCRs are a way to ensure use happens in the presence of medical professionals. More recently, the COVID-19 pandemic resulted in an increase in the practice of ‘virtual spotting’, whereby people who use drugs can be in touch with a virtual companion (either by phone or online) while using, who can alert emergency services if the person becomes unresponsive.[77] One such programme is the Never Use Alone hotline, which operates 24/7 from the United States.[7,78] While these programmes work well for many people, their effectiveness is still limited by the criminalisation of drugs, as some people may not want any contact with emergency services.

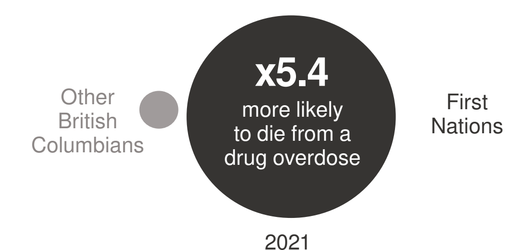
SPOTLIGHT

RACISM, DRUG CONTROL AND HARM REDUCTION

From 1999 to 2019, overdose deaths increased five-fold among American Indian and Alaska Native communities in the United States



In 2021, First Nations people were 5.4 times more likely to die from a drug overdose than other British Columbians



Drug control in North America, as around the world, has long been associated with attempts to control and repress Black, Brown and Indigenous people.[79] Structural racism continues to have a major impact on the accessibility of harm reduction for these groups in both Canada and the United States.[7,16,19,23,54]

Civil society and academic observers in the United States note that, in some areas, there is a tendency for harm reduction services to be concentrated in predominantly white neighbourhoods[24,26,80], as is the case in Phoenix, Arizona, for example[53]. This is despite the fact that overdoses are now increasing fastest among Black Americans, rather than white Americans. Black people make up 12% of the United States' population, but represented 17% of overdose deaths in 2020.[81,82] Some data suggests that the overdose crisis may worsen among Black Americans, even as figures among white Americans improve. In Maryland from 2017 to 2020, for example, overdose deaths among white people decreased by 14%, but they increased by more than 40% among Black people.[83]

"From 1999 to 2019, overdose deaths increased five-fold among American Indian and Alaska Native communities in the United States, while increasing three-fold in the general population. In 2021 in British Columbia, First Nations people made up 15% of drug overdose deaths but only represent 3.3% of the population."

In January 2021, the Biden administration issued an executive order requiring federal agencies to increase efforts to improve services for 'underserved communities', including 'Black, Latino, and Indigenous and Native American' people.[84] In alignment with this order, the federal Harm Reduction Program Grant introduced in 2022 commits to funding projects and programmes that seek to address drug-related health disparities between racial groups (as well as other groups that have been marginalised, such as LGBTQI+ communities).[10] It remains to be seen if this explicit aim will have a significant impact on the accessibility of harm reduction services for these groups.

In Canada and the United States, First Nations and Indigenous people are also disproportionately impacted by drug overdose deaths. From 1999 to 2019, overdose deaths increased five-fold among American Indian and Alaska Native communities in the United States, while increasing three-fold in the general population.[85] In 2021 in British Columbia – the province with the greatest availability of harm reduction services – First Nations people made up 15% of drug overdose deaths but only represent 3.3% of the population.[86] First Nations people were 5.4 times more likely to die from a drug overdose than other British Columbians. The situation is particularly grave among First Nations women. Among the general population, 19% of people who died from an overdose in 2021 were women, but among First Nations people, women made up almost double the proportion of overdose deaths (36%).[86]

To address this, the First Nations Health Alliance has an active harm reduction programme, distributing more than 40,000 doses of naloxone in 2021, including bulk orders sent directly to 106 First Nations communities and organisations in Canada.[86] It also works closely with partners in the health system to foster more culturally safe care for people from First Nations communities and to combat anti-Indigenous racism in health services.[86] In the United States in July 2021, the Substance Abuse and Mental Health Services Administration expanded substance use grants for Indigenous communities, allowing harm reduction supplies to be purchased with funds.[87] As a result, more communities have expanded into harm reduction work, including naloxone distribution and substance use education.[88] One civil society actor estimated there now may be as many as 150 tribal-led NSPs in the United States.[88]

People who have migrated to the United States, primarily from Asia and Latin America, also face severe challenges in accessing harm reduction services. Not only are services rarely located in areas where migrants live, people who are undocumented also face severe consequences related to drug criminalisation. In the 2020 fiscal year, United States Immigration and Customs Enforcement made 51,912 non-trafficking drug arrests: a rate of 1 every 9 minutes.[7,89] Of these arrests, 36,647 led to a criminal conviction.[89] Non-citizens with drug-related convictions may face detainment without hearing in immigration detention facilities while waiting for potential deportation.[90] They can also face disqualification from citizenship, visas and permanent residency ('green cards').[7,14] Civil society actors report that people who are migrants may avoid engaging with harm reduction services for fear of being handed over to immigration authorities and subjected to the compounded consequences of criminalisation.[14,60]

1 Degenhardt L, Webb P, Colledge-Frisby S, Ireland J, Wheeler A, Ottaviano S, et al. (under review), 'A global systematic review of the epidemiology of people who inject drugs: Prevalence, sociodemographic characteristics, risk environments and injecting-related harm, *The Lancet Global Health*.
2. Jacka B, Larney S, Degenhardt L, Janjua N, Høj S, Krajden M, et al. (2020), 'Prevalence of Injecting Drug Use and Coverage of Interventions to Prevent HIV and Hepatitis C Virus Infection Among People Who Inject Drugs in Canada', *Am J Public Health*,110(1):45–50.
3. Ka Hon Chu S (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
4. Government of Canada, Health Canada, 'Supervised consumption sites: Status of application [internet]. Available from www.canada.ca/en/health-canada/services/substance-use/supervised-consumption-sites/status-application.html.
5. Bradley H, Hall E, Asher A, Furukawa N, Jones CM, Shealey J, et al. (2022), 'Estimated number of people who inject drugs in the United States', *Clinical Infectious Diseases* ciac543.
6. NASEN, 'SEP Locations [internet]. Available from www.nasen.org/.
7. Vakharia S (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
8. Centres for Disease Control and Prevention, 'Provisional Drug Overdose Data' [internet, cited 12 August, 2022]. Available from www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm.
9. Public Health Agency of Canada, Special Advisory Committee on the Epidemic of Opioid Overdoses (2022), 'Opioid- and Stimulant-related Harms in Canada (June 2022)' [internet, cited 12 August 2022]. Available from https://health-infobase.canada.ca/substance-related-harms/opioids-stimulants/.
10. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (2022), *FY 2022 Harm Reduction Program Grant*.
11. Santamour T (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
12. Bluthenthal R (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
13. Park JN (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
14. Jones L (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
15. Donigan D (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
16. Steffin M (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
17. Zabielski B (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
18. Fields H (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
19. Purchase S (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
20. Stout DD (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
21. Meaders S (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
22. Spencer S (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
23. Pardo B (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
24. King C (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
25. Curtis M (2022), 'Global State of Harm Reduction reviewer response'.
26. Murray S (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
27. Eskildsen N (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
28. Voyles N (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
29. Farah T (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
30. NYC Health (21 December, 2021), 'Overdose Prevention Centers Averted 59 Overdoses in First Three Weeks of Operation' [internet cited 15 August, 2022]. Available from www1.nyc.gov/site/doh/about/press/pr2021/overdose-prevention-centers-prevent-59-deaths.page.
31. Agioritis M (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
32. Bailey K (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
33. Westfall J (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
34. Fletcher I (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
35. Bonn M (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
36. Brothers T (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
37. Parker J (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
38. Mercredi J(2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
39. DeMong K (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
40. Nowell M, Arkell C (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
41. Ministry of Health (British Columbia), Ministry of Mental Health and Addictions (2021), *Access to Prescribed Safer Supply in British Columbia: Policy Direction*.
42. Downer M (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
43. Vanderschaeghe SJ (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
44. Government of Canada, 'B.C. receives exemption to decriminalize possession of some illegal drugs for personal use' [internet, cited 30 August, 2022]. Available from www.canada.ca/en/health-canada/news/2022/05/bc-receives-exemption-to-decriminalize-possession-of-some-illegal-drugs-for-personal-use.html.
45. House of Commons of Canada, 'An Act to amend the Criminal Code and the Controlled Drugs and Substances Act' [internet]. Available from https://www.parl.ca/DocumentViewer/en/44-1/bill/C-5/third-reading.
46. Sacramento: Office of the Governor, Newsom G (2022), 'Veto message on Bill SB 57, Controlled substances: overdose prevention program'.
47. Illsley S (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
48. CBC News, Latimer K (23 April, 2021,) 'Community steps up for Prairie Harm Reduction drug consumption site after Sask. gov't refuses' [internet, cited 18 August, 2022]. Available from https://www.cbc.ca/news/canada/saskatchewan/community-support-prairie-harm-reduction-1.5997988.
49. CBC News, Zakreski D (8 March, 2022), 'Kayla DeMong vows to fight the good fight at Prairie Harm Reduction in Saskatoon' [internet, cited 18 August, 2022]. Available from https://www.cbc.ca/news/canada/saskatoon/kayla-demong-prairie-harm-reduction-1.6376857.
50. The New York Times, Hoffman J (29 July, 2022), 'Allergan Reaches Tentative $2.37 Billion Deal to Settle Opioid Suits' [internet, cited 5 September, 2022]. Available from www.nytimes.com/2022/07/29/health/allergan-opioids-settlement.html [paywall].
51. The New York Times, Hoffman J (26 July, 2022), 'Teva Reaches Tentative $4.25 Billion Settlement Over Opioids' [internet, cited 5 September, 2022]. Available from https://www.nytimes.com/2022/07/26/health/teva-opioids-settlement.html.
52. Saucier R (2022), 'Global State of Harm Reduction reviewer response'.
53. Russell D (2022), 'Global State of Harm Reduction 2022 survey response, United States'
54. Godvin M (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
55. Legislative Analysis and Public Policy Association, Model Syringe, Services Program Act working group (2021) 'Model Syringe Services Program Act' [internet, cited 15 August, 2022]. Available from https://legislativeanalysis.org/model-syringe-services-program-act/.
56. Trimble C (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
57. Siegel Z (2022), 'Global State of Harm Reduction 2022 survey response, United States'.
58. Costello AM (2020), 'Mandatory Medicaid State Plan Coverage of Medication Assisted Treatment'.
59. Dasgupta N (2022), 'Global State of Harm Reduction 2022 survey response, United States'
60. Al-Hakim E (2022), 'Global State of Harm Reduction 2022 survey response, United States'
61. Goedel WC, Shapiro A, Cerdá M, Tsai JW, Hadland SE, Marshall BDL (2020), 'Association of Racial/Ethnic Segregation With Treatment Capacity for Opioid Use Disorder in Counties in the United States', *JAMA Network Open 2020*, 3(4):203711.
62. Phillips C (2022), 'Global State of Harm Reduction 2022 survey response, United States'
63. Speed K (2022), 'Global State of Harm Reduction 2022 survey response, Canada'.
64. Department of Justice (United States), Civil Rights Division (2022), *The Americans with Disabilities Act and the Opioid Crisis: Combating Discrimination Against People in Treatment or Recovery*.
65. Campbell MB (2022), 'Global State of Harm Reduction 2022 survey response, United States'
66. CDC, Thangada S et al. (17 September, 2021), 'Notes from the Field: Xylazine, a Veterinary Tranquilizer, Identified as an Emerging Novel Substance in Drug Overdose Deaths — Connecticut, 2019–2020',

MMWR Morb Mortal Wkly Rep,70, [internet, cited 5 September, 2022]. Available from www.cdc.gov/mmwr/volumes/70/wr/mm7037a5.htm.

67. Karamouzian M, Papamihali K, Graham B, Crabtree A, Mill C, Kuo M, et al. (2020), 'Known fentanyl use among clients of harm reduction sites in British Columbia, Canada' *International Journal of Drug Policy*, 77:102665.
68. CBC News, Larsen K (8 April, 2022), 'First ever paid prescription fentanyl program launches in Vancouver' [internet, cited 12 August, 2022]. Available from www.cbc.ca/news/canada/british-columbia/paid-prescription-fentanyl-vancouver-1.6412696.
69. Filter Magazine, Lekhtman A (19 July, 2021), 'Vancouver Activists Hand Out Drugs, Demand Better Safe Supply Options' [internet, cited 15 August, 2022]. Available from https://filtermag.org/vancouver-free-drugs-safe-supply/.
70. Government of Canada, Hadju P, 'Letter from the Minister of Health regarding treatment and safer supply' [internet]. Available from https://www.canada.ca/en/health-canada/services/substance-use/minister-letter-treatment-safer-supply.html.
71. Hales J, Kolla G, Man T, O'Reilly E, Rai N, Sereda A (2020), Safer Opioid Supply Programs (SOS): A Harm Reduction Informed Guiding Document for Primary Care Teams.
72. Government of Canada, Health Canada H (2020), COVID-19 and substance use: Service provider toolkit [internet, cited 12 August, 2022]. Available from www.canada.ca/en/health-canada/services/substance-use/toolkit-substance-use-covid-19.html.
73. Reed MK, Salcedo VJ, Guth A, Rising KL (2022), '"If I had them, I would use them every time": Perspectives on fentanyl test strip use from people who use drugs', *Journal of Substance Abuse Treatment*, 140:108790.
74. Klaire S, Janssen RM, Olson K, Bridgeman J, Korol EE, Chu T, et al. (2022), 'Take-home drug checking as a novel harm reduction strategy in British Columbia, Canada', *International Journal of Drug Policy*, 106:103741.
75. Filter Magazine, Medrano K (1 August, 2022), 'For the First Time, Harm Reduction Gets a Naloxone of Its Own' [internet, cited 18 August, 2022]. Available from https://filtermag.org/naloxone-shortage-hikma-pfizer-remedy-alliance/.
76. Irvine MA, Oller D, Boggis J, Bishop B, Coombs D, Wheeler E, et al. (2022), 'Estimating naloxone need in the USA across fentanyl, heroin, and prescription opioid epidemics: a modelling study', *The Lancet Public Health*, 7(3):210–8.
77. Perri M, Kaminski N, Bonn M, Kolla G, Guta A, Bayoumi AM, et al (2021), 'A qualitative study on overdose response in the era of COVID-19 and beyond: how to spot someone so they never have to use alone' *Harm Reduction Journal*, 18(1):85.
78. Never Use Alone Inc, 'Never Use Alone Inc. – 800-484-3731' [internet, cited 12 August, 2022]. Available from https://neverusealone.com/.
79. Daniels C, Aluso A, Burke-Shyne N, Koram K, Rajagopalan S, Robinson I, et al. (2012), 'Decolonizing drug policy', *Harm Reduction Journal*, 18(1):120.
80. Bolt M (2022), 'Global State of Harm Reduction 2022 survey response, United States'
81. US Census Bureau (2021) *Racial and Ethnic Diversity in the United States: 2010 Census and 2020 Census* [internet, cited 12 August, 2022]. Available from www.census.gov/library/visualizations/interactive/racial-and-ethnic-diversity-in-the-united-states-2010-and-2020-census.html.
82. Kaiser Family Foundation (2022), *Opioid Overdose Deaths by Race/Ethnicity.*
83. Inter-Agency Heroin & Opioid Coordinating Council, Jones A, Brathwaite N. (2021), *Exploring Disparities Among Opioid Use Disorder Populations in Maryland.*
84. The White House, President Biden J (2021), Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. Available from www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
85. Qeadan F, Madden EF, Mensah NA, Tingey B, Herron J, Hernandez-Vallant A, et al. (2022), 'Epidemiological trends in opioid-only and opioid/polysubstance-related death rates among American Indian/Alaska Native populations from 1999 to 2019: a retrospective longitudinal ecological study', *BMJ Open 2022*, 12(5):053686.
86. First Nations Health Authority (2022), *First Nations and the toxic drug poisoning crisis in BC: January - December 2021.*
87. Substance Abuse and Mental Health Services Administration (23 July, 2021), 'SAMHSA releases Tribal Behavioral Health grants totaling $7 million to provide support to Native American communities' [internet, cited 12 August, 2022]. Available from www.samhsa.gov/newsroom/press-announcements/202107230430.
88. Hubbard A (2022), 'Global State of Harm Reduction 2022 survey response, United States'
89. US Immigration and Customs Enforcement (2022), *US Immigration and Customs Enforcement Fiscal Year 2020 Enforcement and Removal Operations Report*.
90. Drug Policy Alliance, 'Uprooting the Drug War. Immigration: The drug war invades immigrant communities' [internet, cited 12 August, 2022]. Available from https://uprootingthedrugwar.org/immigration/.
91. National Harm Reduction Coalition, 'Syringe Access in Your State' [internet, cited 15 August, 2022]. Available from https://harmreduction.org/issues/syringe-access/landscape-report/state-by-state/.
92. Substance Abuse and Mental Health Services Administration, 'Opioid Treatment Program Directory' [internet, cited 15 August, 2022]. Available from https://dpt2.samhsa.gov/treatment/directory.aspx.
93. Delaware Health and Social Services, 'Needle Exchange Program' [internet, cited 15 August, 2022]. Available from www.dhss.delaware.gov/dph/dpc/needleexchange.html.
94. North Carolina Department of Health and Human Services, (2022), 'Syringe Services Program in North Carolina'.