



Regional Overview

2.6 North America



North America

Table 2.6.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in North America

Country/territory with reported injecting drug use ^a	People who inject drugs	HIV prevalence among people who inject drugs (%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs (%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%)	Harm reduction response		
					NSP ^b 	OST ^c 	DCR ^d 
Canada	90,000 (72,000 – 108,000) ⁽¹⁾	11% ⁽²⁾	68 ⁽³⁾	nk			
United States	800,000 ^{(4)e}	3.6% ⁽⁴⁾	43.1 ⁽⁵⁾	11.8 (3.5-20) ^{(6)f}			

nk = not known

^a There are no identified reports of injecting drug use in Greenland.

^b The number in brackets represents the number of operational NSP sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers.

^c The number in brackets represents the number of operational OST sites, including publicly and privately funded clinics and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine, (BN) = buprenorphine–naloxone combination, (O) = any other form (including morphine and codeine).

^d DCR = drug consumption room, also referred to as a safer injecting facility (SIF).

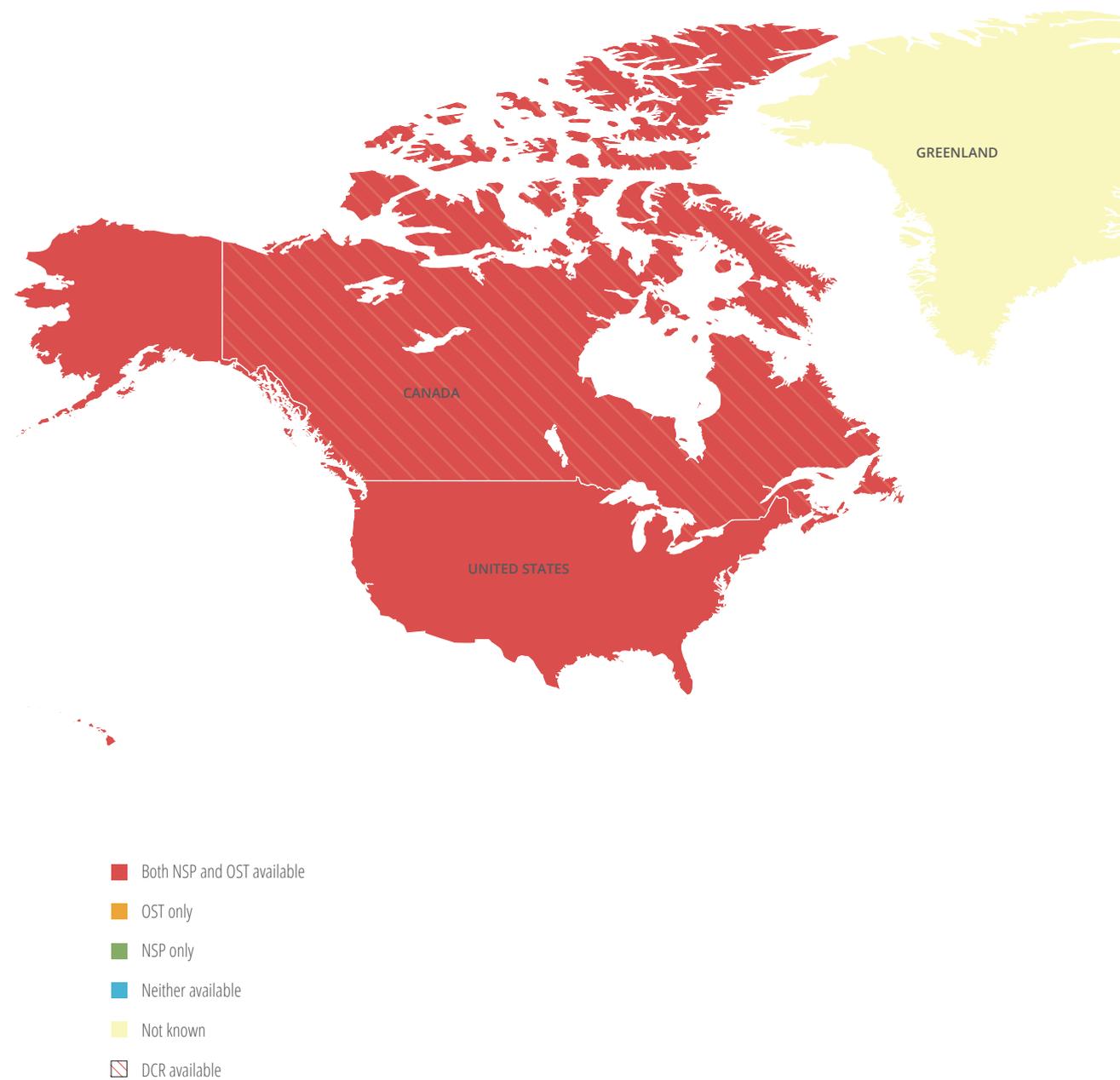
^e It has been reported that over 2 million people who inject drugs reside in North America, with both figures for Canada and the United States believed to be underestimates.

^f Year of estimate: 1992.

^g These services operate in 35 of the 50 states, which include Puerto Rico. Figure from 2016.



Map 2.6.1: Availability of needle and syringe programmes (NSP) and opioid substitution therapy (OST)



Harm reduction in North America

Overview

There are an estimated 2 million people who inject drugs in North America, of which 90% currently live in the United States.⁽⁴⁾ Approximately 3.6% of people who inject drugs in the US are living with HIV, 80% of whom are also co-infected with hepatitis C (HCV).⁽⁴⁾ In Canada, 11% of the estimated 90,000 people who inject drugs are living with HIV.^(3, 4) National estimates, however, suggest the number of people who inject drugs newly infected with HIV in Canada is declining.⁽²⁾ While the total number of new HIV infections is declining in the US thanks to HIV testing remaining stable or increasing in recent years, progress has been uneven and diagnoses have increased among some key populations.⁽⁸⁾ The most explosive HIV outbreak on record, for example, occurred in 2014/2015 and was associated with injecting drug use.

The election of a new federal government in Canada in October 2015 has ushered in the prospect of drug policy reform in the country, with harm reduction adopted as a pillar in its response to drugs. Although the US has not embraced harm reduction in quite the same way, it does appear to be adopting more of a public health approach than in previous years.

Key harm reduction services, such as needle and syringe programmes (NSPs) and opioid substitution therapy (OST), are available to people who inject drugs in both countries, but barriers to access persist and service provision remains uneven. The region's most marginalised and stigmatised populations, including prisoners, racialised and Indigenous communities, continue to be the most disproportionately affected by these disparities.

The prevalence of opioid use in North America remains high (3.8%) in relation to the global average,⁽⁹⁾ and the region continues to experience the world's highest drug-related mortality rate in the world.⁽¹⁰⁾ The magnitude of the epidemic has forced leaders in both countries to intensify their responses, resulting in a number of positive developments since 2014, including a dramatic increase in naloxone coverage on both sides of the border. Civil society continues to be very active and has played a key role in the numerous harm reduction victories achieved since the *Global State* last reported in 2014.

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

NSPs are available in both Canada and the US. Although the exact number of NSPs operating in Canada is not known, it is estimated that 94.5% of people who inject drugs used sterile injecting equipment at last injection.⁽⁴⁾ In the US, 244 NSPs are now operating across the country,⁽¹¹⁾ representing a 25% increase since the *Global State* last reported in 2014. In reality, however, with several NSPs operating clandestinely in those states where punitive environments prevail, these figures are likely to be higher.

This increase in NSPs in the US has in large part been driven by a dramatic HIV outbreak in rural Indiana in 2014/2015 associated with injecting drug use. In less than 12 months, 181 cases of HIV infection were documented in a town with a population of 4,300 - one of the highest incidence rates ever recorded.⁽¹²⁾ In the wake of this public health emergency, the federal government changed its legal position on NSPs, resulting in a partial repeal of the 28-year ban on federal funding for NSPs. While the use of federal funds to purchase sterile needles or syringes to inject illegal drugs remains prohibited, the Consolidated Appropriations Act, 2016, passed by Congress in December 2015, enables federal funds to be allocated to other aspects of NSPs, including HIV and HCV testing, naloxone provision, human resources, rent, and other expenditures needed to keep them in operation.⁽¹³⁻¹⁵⁾

Despite these developments, NSP coverage in the US remains low. According to UNAIDS, 50 syringes are distributed per person who injects drugs per year, and only 35% of people who inject drugs are believed to have used sterile equipment in the past 12 months⁽⁴⁾ According to civil society, people who inject drugs in both the US and Canada continue to come up against several barriers to accessing this service. Fear of stigma and discrimination, for example, impedes access, particularly in rural or remote communities where there is a heightened risk of being identified. In Canada, some municipal bylaws and other legal barriers reportedly continue to prevent NSPs from operating within particular communities which, again, tends to disproportionately affect people who inject drugs in rural and remote communities, as well as Indigenous (First Nations, Métis and Inuit) communities.⁽¹⁶⁾

^h Only in 35 states, the District of Columbia, Puerto Rico, and the Indian Nations. For more info, see North American Syringe Exchange Network. Directory of Syringe Exchange Programs. Available at: <https://nasen.org/directory>.



Meanwhile, in the US, drug law enforcement is often responsible for hindering access to NSPs, even where these are legally sanctioned. Five years ago, a national survey revealed that nearly 50% of NSPs reported that their clients experienced police harassment on at least a monthly basis.⁽¹⁷⁾ A recent study on police encounters among NSP clients in Baltimore confirms that this harmful practice continues today. The study found that even under a favourable policy and legal regime, police continue to unlawfully confiscate injecting equipment and interfere with the functioning of NSPs, with non-white clients more likely to report confiscation of injecting equipment or arrest.⁽¹⁸⁾ Adversely affecting both the behaviour and health of people who inject drugs, drug law enforcement is evidently an important determinant of health for this population, and particularly for marginalised groups within it. In order to ensure the full uptake and impact of NSPs, policing as a barrier to access should be urgently addressed in the country.

Opioid substitution therapy (OST)

Like NSPs, OST is available in both Canada and the US. In Canada, methadone and suboxone are available to people who use opioids.^(16, 19) In Ontario, Canada's most populous province, the number of people receiving methadone was just under 50,000 in 2014, up from 29,000 in 2010.⁽²⁰⁾ A comparable number of people are currently also receiving OST in the provinces of British Columbia, Saskatchewan and New Brunswick.⁽²¹⁾ In light of a staggering number of opioid overdoses across the country in recent years, however, there have been calls to scale-up OST provision across the country.⁽¹⁶⁾ Following a legal challenge, the federal government took an important step on 7 September 2016 by officially overturning the ban on heroin-assisted therapy (HAT).⁽²²⁾ Under the new regulations, physicians can prescribe pharmaceutical-grade heroin to individuals for whom it is clinically indicated, including those who have tried other approaches, such as methadone and buprenorphine, without success.⁽²³⁾

In the US, the 2015 National Drug Control Strategy affirms the government's commitment to ensuring access to evidence-based treatment models, including OST⁽²⁴⁾ and methadone or buprenorphine is currently available in 48 states, as well as in Washington DC. Regrettably, the service remains completely unavailable in North Dakota and Wyoming.⁽¹⁵⁾ According to the most recent data, 382,237 people are enrolled in OST in the country.⁽⁴⁾ Unsurprisingly, the number of private, for-profit facilities providing methadone has been

increasing, with 60% of people who received methadone in 2012 receiving it from this type of facility.⁽²⁵⁾

Despite these services being available, several barriers continue to limit their accessibility throughout the region. In the US, these are typically associated with unreasonable cost and lack of health care coverage.⁽²⁶⁾ In Canada, obstacles range from unaffordable user or clinic fees, long waiting lists, restrictive directly-observed therapy requirements, lack of access to take home doses, and municipal resistance to the operation of OST clinics materialising in zoning bylaws and other legal barriers.^(16, 19) One other serious obstacle to accessing OST in Canada is the limited number of physicians able to prescribe OST, coupled with their geographical inaccessibility, which disproportionately affects Indigenous and other rural or remote communities. Recent advances in telemedicine-delivered OST in Ontario, whereby physicians prescribe OST through telecommunications technology, are encouraging, however, and experts believe this trend could be adopted by other provinces in the near future.⁽²¹⁾

Drug Consumption Rooms (DCRs)

Drug consumption rooms, generally known as safe injection facilities or sites (SIFs/SISs) in North America, are professionally supervised healthcare facilities where people can consume drugs in a safe and non-judgmental environment. Since the *Global State* last reported, one additional DCR – the Dr. Peter Centre – received a two-year stamp of approval from the Canadian government to operate legally in Vancouver, bringing the total of authorised DCRs in the region to two. With so many people injecting drugs in North America and so few sanctioned DCRs, coverage is currently virtually non-existent, particularly since both facilities are located in Vancouver. Several cities across Canada, however, now have firm plans to establish DCRs. Toronto, for example, is in the process of applying for legal exemption to open three facilities.⁽¹⁹⁾ While Canada has become much more amenable to the idea of DCRs since 2015, having recently approved a 4-year extension for Insite to continue operating its DCR, the new federal government has defended the *Respect for Communities Act*, a law which requires a minimum of 26 conditions to be met before the federal Minister of Health may even consider allowing an exemption for a DCR to legally operate. Regrettably, the current government has not taken firm steps to repeal or amend the law.^(16, 19)

While there are still no DCRs in the US, some recent initiatives are worth mentioning. For example, in

September 2015, the Harm Reduction Coalition, with OSF and the American Foundation for AIDS Research, convened a consultation on alternatives to public injecting.⁽¹⁵⁾ Experts from several countries shared their various DCR models, planning and policy development processes, implementation challenges and evaluation results, with participation from a broad range of stakeholders, including government representatives, advocates for people who use drugs, service providers and law enforcement.⁽²⁷⁾ Also in 2015, a community-based NSP modified a bathroom to accommodate safer drug consumption and then shifted to opening a supervised injecting room.⁽¹⁵⁾ Although service delivery was limited in a number of ways due to the illegal nature of the DCR, both models were evaluated to determine and compare the benefits and challenges in how each operated. The study has now officially come to an end and the results will soon be published. In terms of legal and policy developments, DCR bills have now been introduced in the states of Maryland and California, and there have been discussions around introducing one in Seattle, too.⁽¹⁵⁾ Finally, New York City Council Preliminary Budget for 2017 includes a US\$100,000 for an impact study on instituting DCRs in New York City.⁽²⁸⁾

Viral hepatitis

Viral hepatitis among people who inject drugs continues to be a major public health concern in North America. In the United States, there are between 2.7 to 4.7 million people living with chronic hepatitis C virus (HCV),⁽²⁹⁾ and an estimated 30,000 new cases are acquired each year,⁽³⁰⁾ making HCV the largest on-going infectious disease epidemic in the country. Injecting drug use remains the most common risk factor for acquiring HCV in the US, accounting for more than 50% of all American cases.⁽³¹⁾ Nearly 75% of people living with HIV who inject drugs are also living with HCV, which more than triples their risk for liver disease, liver failure and liver-related death.⁽³²⁾ In recent years, an emerging HCV epidemic among young people who inject drugs has been reported in rural and suburban settings in the US^(30, 33-35) Those most likely to be affected have been identified as being 25 years of age or younger, primarily white, both male and female, residing in non-urban areas, having used oral prescription opioids (e.g. oxycodone) before transitioning to injecting heroin, and highly mobile, often making them more difficult to locate.^(30, 36) There is a growing concern that this emerging epidemic could begin to reverse the decline in overall HCV incidence and prevalence observed in the country over the past two decades.⁽³⁶⁾

According to the latest modelling, approximately 252,000 Canadians were chronically infected with HCV in 2013.⁽³⁷⁾ Similar to the US, sharing injecting equipment is considered the most significant mode of HCV transmission in the country,⁽³⁸⁾ accounting for over 60% of newly acquired HCV infections each year.⁽³⁹⁾ A considerable proportion of people living with HCV are also living with HIV. Canadian studies conducted among people who inject drugs have reported HCV and HIV co-seropositive infection at approximately 10%.⁽³⁾

Despite the lack of data on testing and treatment coverage in the region, the considerable barriers standing between people who use drugs and these services suggest that accessibility remains quite limited for this population. In the US, access to HCV testing is limited by the cost of testing kits,⁽¹⁵⁾ and treatment is so prohibitively expensive (US\$84,000 per HCV treatment course)⁽³⁹⁾ that Medicaid and private insurers have responded by restricting access. Despite the fact that treating people who inject drugs with curative HCV therapies could reduce HCV prevalence by 20-80%,⁽²⁹⁾ the overwhelming majority of states restrict access to HCV treatment for people who inject drugs and those receiving treatment for drug dependence, such as OST.⁽⁴⁰⁾ In 88% of state Medicaid committees, drug and alcohol use is included in the eligibility criteria, with half requiring a period of abstinence and two-thirds requiring drug screening.⁽⁴⁰⁾ With these discriminatory, unfounded and stigmatising restrictions in place, it is not surprising that lawsuits alleging discrimination are currently being prepared.⁽⁴¹⁾ Furthermore, two-thirds of states have restrictions that limit the prescription of newly approved HCV medicines to HCV specialists, rather than allowing prescription by HIV or harm reduction service providers, who are in better contact with people who inject drugs.⁽⁴²⁾ The recent *Action Plan for the Prevention, Care, and Treatment of Viral Hepatitis 2014-2016* is somewhat encouraging, however, in that it recognises the importance of focusing a variety of resources on improving access to HCV services for people who inject drugs, and recommends that "(w)here state, local, or private resources are available, these comprehensive services should include access to sterile injection equipment".⁽³⁶⁾

Although Canada does not have a national policy on HCV, testing and treatment are theoretically available for people use drugs. Again, while coverage is difficult to assess due to a lack of data, civil society reports that access remains a challenge for many.⁽¹⁶⁾ In a national sample of people who inject drugs, for example, over 25% of those found to be living with HCV were unaware



of their positive status prior to being tested in the study.⁽⁴³⁾ In addition, only half of those who knew their status were consulting a physician for HCV care, while only 10% of these individuals reported ever receiving HCV treatment.⁽⁴³⁾ One of the primary deterrents to seeking testing and treatment in the country remains fear of stigma and discrimination in health care settings. This was made vividly clear in a 2011 study among 528 HCV specialist physicians from across Canada, which found that only 19% were willing to provide HCV treatment to patients who were actively injecting drugs.⁽⁴⁴⁾

Tuberculosis (TB)

Data on tuberculosis (TB) prevalence, prevention, treatment and care among people who inject drugs in the region continue to be scarce, limiting the effectiveness of policies and programmes designed to address this issue and making it difficult to provide a useful overview of the situation in both countries. Despite this shortage of systematic research, a few general comments and recommendations can still be made.

Like in all other regions of the world, people who use drugs in North America have increased rates of TB infection, particularly if they are living with HIV.⁽⁴⁵⁾ When TB treatment is integrated with HIV, HCV and OST, improved outcomes for each condition have been observed, as well as improved adherence and retention in TB treatment for those living with TB.⁽⁴⁵⁾ In accordance with international standards, services in both the US and Canada should ensure that they adopt a coordinated and integrated response to the needs of people who use drugs in order to provide universal access to prevention, treatment and care services at all entry points.⁽⁴⁶⁾ This requires collaborative planning between HIV and TB services, harm reduction services and the criminal justice system.⁽⁴⁶⁾

Antiretroviral therapy (ART)

People who inject drugs continue to be at high risk of transmitting or acquiring HIV in the region for several reasons, including laws criminalising the possession and use of drugs, the resulting high rates of incarceration, and a lack of sterile syringes. In 2010, 7% (3,096) of the estimated 47,352 diagnoses of HIV infection in the United States were attributed to injecting drug use, of which 46% were among Black people.⁽⁴⁷⁾ In 2013, 10% of all AIDS diagnoses and more than one in four (26%) deaths among people with AIDS were attributed to injecting drug use.⁽⁴⁷⁾ More recently, an HIV outbreak in

rural Indiana associated with injecting drug use resulted in 181 cases of HIV infection in a small village in less than 12 months, one of the highest incidence rates ever recorded.⁽¹²⁾

In Canada, incidence and prevalence rates are similarly high. According to national HIV estimates from 2014, people who inject drugs are 59 times more likely to get HIV than people who do not inject drugs, 19% of people living with HIV may have acquired their infection through injecting drug use, and HIV prevalence among people who inject drugs is approximately 11%.⁽¹⁾ The same study found disparities in HIV incidence among people who inject drugs, with 21% and 45% of the estimated new HIV infections in women and Aboriginal people attributable to injecting drug use, compared to an estimated 11% of new infections among all Canadians.⁽²⁾

Despite these figures, a large proportion of people who inject drugs often still have trouble accessing HIV testing, treatment and care. According to UNAIDS, between 50-75% of people who inject drugs in the US, and around 75% of people who inject drugs in Canada are accessing HIV testing.⁽⁴⁸⁾ Data collected as part of the Canadian HIV surveillance system showed that an estimated 20% of people who inject drugs and are living with HIV are not aware of their positive status.⁽⁴⁹⁾ Civil society reports that Indigenous people living with HIV are only half as likely to have access to ART as non-Aboriginal individuals.⁽¹⁹⁾ In the US, access to treatment is often restricted by socio-economic factors, with almost two-thirds of people who inject drugs living with HIV reporting being homeless, 61% reporting being incarcerated, and 44% reporting having no health insurance in the last 12 months.⁽⁴⁷⁾ Barriers to initiating ART in Canada are often linked to many of the same issues. They may also relate to health professionals' stigma and discrimination against people who inject drugs and/or a requirement to initiate drug treatment as a condition of access to ART.⁽⁵⁰⁾

Harm reduction in prisons

The United States has the world's second highest rate of incarceration at 698 per 100,000.⁽⁵¹⁾ A new Human Rights Watch report on the human toll of criminalising drug use in the US reveals that state law enforcement agencies made more than 1.25 million arrests for drug possession in 2015, which translates into an arrest for drug possession every 25 seconds of each day.⁽⁵²⁾ The majority of these arrests result in incarceration. Indeed, 50% of males and 59% of females in federal prison were serving time for drug offences in September 2014,⁽⁵³⁾ and every year, nearly 200,000 people who are dependent on opioids enter the American criminal justice system.⁽⁵⁴⁾

The US's so-called "war on drugs" has had vastly unequal outcomes across racial groups, with Black and Latinxⁱ communities experiencing much higher arrest and incarceration rates.⁽⁵²⁾ For example, Black adults accounted for only 14% of people who used drugs in the country in 2014, but made up 37% of those arrested for drug possession, effectively making them nearly six times more likely to be arrested for drug possession than white adults.^(52, 55)

Although the incarceration rate is much lower in Canada, systemic discrimination and inequality have similarly resulted in Aboriginal and Black people being overrepresented in the country's prisons. Although they only make up 3.8% of the Canadian population, Indigenous people currently represent approximately 23% of the federal prison population⁽⁵⁶⁾ and are among those most targeted in the country's drug enforcement measures.⁽⁵⁷⁾ Similarly, Black people represent approximately 9.5% of the federal prison population while representing just 2.9% of the Canadian population as a whole, and Black women are most likely to be incarcerated for a drug-related offence, often committed as an attempt to address situations of poverty.⁽⁵⁸⁾

Similar to all other regions of the world, injecting drug use occurs in North American prisons. A recent study undertaken in Baltimore on the links between incarceration and injecting drug use found that not only did incarceration *not* curtail injecting drug use, but also that longer periods of incarceration were associated with increases in injecting among former injectors.⁽⁵⁹⁾ In Canada, 80% of men entering the Canadian federal system are thought to use drugs.⁽⁵⁸⁾ In 2012, it was reported that 34% of drug offenders had ever injected drugs, while injecting during incarceration was reported by 11% of the prison population in Canada.⁽⁶⁰⁾

HIV prevalence among prisoners in the United States is reportedly three times greater than the broader population, and one in every seven people living with HIV will be incarcerated every year.⁽⁶¹⁾ At the same time, 4.2% and roughly 33% of prisoners are living with TB and HCV respectively.^(62, 63) In Canada, the estimated HIV and HCV (17.2%) prevalence rate is respectively 10 and 30-40 times greater in prisons than it is outside of prisons.^(58, 64) These infections, like incarceration, are marked by significant racial and socio-economic disparities. In Canada, for example, incarcerated Indigenous people experience significantly higher rates of HIV and HCV than other prisoner groups.⁽⁶⁵⁾

Despite the clear necessity for harm reduction in prisons in the region, provision continues to be woefully

inadequate, falling far short of meeting both the needs of prisoners and international human rights and public health standards. Most critically, needle and syringe programmes remain completely unavailable in the region's prisons. Canadian civil society continues to apply pressure on federal and provincial governments to make this essential service immediately available to prisoners,^j including through a lawsuit against the federal government to compel it to implement prison-based needle and syringe programs.

With OST only available in a small number of American prisons (Riker's Island in New York, and a selection of prisons in Baltimore, Philadelphia and Rhode Island),⁽¹⁵⁾ coverage remains abysmally low. It is estimated that nearly 90% of those currently receiving OST outside of prisons would have their treatment cut off if they were incarcerated,⁽⁶⁶⁾ while the only people typically allowed to initiate OST in prison settings are pregnant women.⁽¹⁵⁾ The situation in Canada, although far from perfect, is considerably better. In all 43 of the country's federal prisons, where people serve a sentence of 2 years or more, OST initiation and maintenance are both available.⁽¹⁶⁾ At the provincial and territorial level, however, there are major gaps in availability and accessibility. Civil society reports that only ten provinces (out of 13 provinces and territories) permit OST continuation, while even fewer allow OST initiation in prisons.⁽¹⁶⁾ Prioritisation of candidates for prison-based OST is also reportedly problematic, with sentence length and release eligibility dates often arbitrarily used to determine who gains access first.⁽⁶⁷⁾ Prisoners in British Columbia launched a constitutional challenge in 2016, alleging that correctional policy prevented them from accessing OST if they were not in custody for at least three months. The policy has since been amended to ensure the provincial prison system follows the same guidelines for administering OST as the College of Physicians and Surgeons of BC, which does not require a waiting period in order to be eligible for OST.⁽¹⁶⁾ Regrettably, and as is often the fate of prison-based harm reduction services, the annual budget for OST in Canadian prisons was cut by just over 10% in 2014/15,⁽⁶⁷⁾ a retrogressive measure that could amount to a violation of the prisoners' right to health under international law.^k Canada's new federal government may revisit this decision as part of its drug policy reform, however.

HIV treatment and care are generally available in American prisons.⁽¹⁵⁾ A recent study found that although most detention facilities provide some degree of HIV testing, only 19% of prisons and 35% of jails provide routine opt-out testing consistent with national and

ⁱ Latinx, pronounced 'La-teen-ex', is the gender-neutral alternative to Latino, Latina and even Latin@.

^j See, for example, Canada Can't Wait: The time for Prison-Based Needle and Syringe Programs is Now. Statement by nearly 250 organisations Canada-wide. 1 June 2016.

^k Under international human rights law, there is a strong presumption that retrogressive measures taken in relation to the right to health contradict the principle of progressive realisation and constitute a violation unless they have been duly justified and weighed against the enjoyment of other rights. See, Committee on Economic, Social and Cultural Rights, General Comment No. 14: The right to the highest attainable standard of health. UN Doc. E/C.12/2000/4, 11 August 2000, paras. 32 and 48.



international guidelines.¹ Routine mandatory HIV testing for all prisoners was reported by only 37% of prisons, in clear violation of prisoners' human rights.⁽⁶⁸⁾ Despite the importance of retaining people living with HIV in treatment, the study also found that less than one-quarter of prisons and jails provide comprehensive treatment services for prisoners living with HIV after their release.⁽⁶⁸⁾ A recent Human Rights Watch report identifies funding as a major barrier to implementing HIV interventions in American jails and prisons. According to the report, "(t)he federal government is the primary funding source for managing the HIV epidemic in all 50 states. The unavailability of this federal funding for prisoners significantly impacts the response to HIV in local correctional settings."⁽⁶⁹⁾

In Canada, HIV testing and treatment are available to individuals in federal, provincial and territorial prisons.⁽¹⁶⁾ Although 93% of all individuals living with HIV in federal prisons were on antiretroviral treatment in 2014-2015,⁽⁷⁰⁾ some harmful practices have still been reported, including treatment disruptions⁽¹⁶⁾ and stigma and discrimination.⁽⁷¹⁾ Earlier this year, a landmark outcome from a legal challenge concerning stigma and discrimination based on a prisoner's HIV status secured a number of positive outcomes, including a requirement to train prison staff on issues relating to people living with HIV or AIDS in prison and display notices on the rights of people living with HIV in all Ontario provincial prisons.⁽⁷¹⁾

While American prisons offer some HCV treatment, routine testing and treatment protocols are available in less than one-third of US prisons and jails.⁽⁷²⁾ A recent study evaluating the effects of HCV screening and testing in prisons found that implementing risk-based and opt-out screening could diagnose up to 122,700 new HCV cases in the next 30 years. Compared with no screening, this could avert up to 12,700 new HCV infections and prevent up to 11,700 liver-related deaths.⁽⁷³⁾ In Canada, systematic screening for HCV is available to prisoners in federal facilities, but unfortunately not in most provincial and territorial facilities.⁽⁷⁴⁾ HCV treatment is available in federal prisons, but prisoners have reported difficulties in accessing treatment, with data recently released by Correctional Service Canada revealing a sharp decline in the number of prisoners receiving HCV treatment because of budget cuts, increasing prison populations and substantial HCV treatment costs.⁽⁷⁵⁾ In many provincial and territorial prisons, HCV treatment is only available to those who were already undergoing treatment in the community.⁽⁷⁴⁾

Condoms are only available in prisons and jails in three American states, Vermont (since 1992), Mississippi (since 1992 and limited to married prisoners receiving conjugal visits) California (since 2014), as well as several cities.⁽⁷⁶⁾ In Canada, condoms are available in all federal prisons, but barriers to access have been reported, including as a result of inconsistent stocking or condom dispensers being located in areas visible to security staff.⁽¹⁶⁾

Finally, some positive developments in overdose prevention among prisoners have taken place in the region since the *Global State* last reported. Most recently, the naloxone programme for public health units in the Canadian province of Ontario was expanded to include prisoners returning to the broader community,⁽⁷⁷⁾ and the Canadian province of British Columbia has begun to provide overdose response training and naloxone kits to prisoners in provincial institutions upon discharge.⁽¹⁰³⁾ In the United States, the Harm Reduction Coalition has been involved in providing naloxone and overdose prevention training to prisoners and their family members in prisons and jails in San Francisco⁽⁷⁸⁾ and in the state of New York, including Rikers Island.⁽¹⁵⁾ In early 2015, a pilot training programme began at the Queensboro Correctional Facility in New York City. To date, more than 1,000 prisoners have been trained in opioid overdose recognition and response, with these now part of the facility's prisoner orientation. A refresher training is offered shortly before prisoners are released, along with the option to receive a naloxone kit free of charge upon release.⁽¹⁵⁾

Overdose

Contributing an estimated 25% of the world's drug-related deaths, North America continues to have the highest drug-related mortality rate in the world.⁽¹⁰⁾ In the United States, the rate of fatal drug overdose has increased by 137% since 2000, with more people dying from drug overdoses in 2014 than during any previous year on record, 61% of which were opioid-related.^(10, 79) Across the border in Canada, drug overdose deaths have jumped 327% since 2008.⁽⁸⁰⁾ In British Columbia and Alberta, two of the hardest-hit provinces, fatal overdoses linked to fentanyl soared from 42 in 2012 to 418 in 2015.⁽⁸¹⁾ Following 200 opioid-related deaths in the first three months of 2016, the province of British Columbia declared its first ever public health emergency.⁽⁸²⁾

This rise in fatal overdoses in the region is thought to be in large part driven by an explosion in prescription opioid dependence. North Americans are thought to consume about 80% of the world's prescription opioids,⁽⁸³⁾ and nearly 80% of current opioid users report

¹ Prisons and jails are different institutions in the United States. Prisons are operated by a state or the federal government and typically hold people with sentences of more than one year. Jails detain people who are accused of crimes and awaiting trial, as well as those convicted of a crime, with the median length estimated to be 48 hours, and generally not exceeding one year. Solomon L, Montague BT, Beckwith CG et al. (2014) 'Survey Finds that Many Prisons and Jails Have Room to Improve HIV testing and Coordination of Post Release Treatment.' *Health Affairs* 33(3):434-42.

that their first opioid was a prescription pain reliever.⁽⁸⁴⁾ Accessibility, cost, and high potency of heroin are reported to be driving the transition from prescription opioids to use of heroin.⁽⁸⁵⁾ This is taking place alongside the rise of illicitly produced fentanyl, a synthetic opioid 50 times stronger than heroin and 100 times more powerful than morphine. The result is that people looking to buy drugs similar to what they were using before, are getting fentanyl (or fentanyl-laced drugs) instead, which are far stronger than what they are used to and leading to a huge increase in fentanyl-related overdoses.⁽⁸⁶⁾

Several important developments have taken place in the region in response to this epidemic. In the US, 37 states and the District of Columbia have now enacted some form of Good Samaritan laws to protect people from arrest or prosecution for drug possession when they call for help in the event of an overdose.⁽⁸⁷⁾ This represents an increase of 13 states since 2014. In 2015, the United States Food and Drug Administration approved nasal spray naloxone, which is thought to be easier to administer,⁽⁸⁸⁾ and as of June 2016, all but three states (Kansas, Montana, Wyoming) had passed legislation designed to improve access to naloxone.⁽⁸⁹⁾ Largely as a result of these legal and regulatory changes, over 150,000 people had received training and naloxone kits by the end of 2014, which has reportedly resulted in the reversal of more than 26,000 overdoses.⁽⁹⁰⁾ Additionally, as of May 2016, naloxone programmes for law enforcement had begun in at least one municipality in 35 states and, while naloxone is still not available 'over the counter', civil society report that it is now available in the corporate pharmacy chains CVS and Walgreens without needing a prescription from a doctor in 23 states.⁽¹⁵⁾

In Canada, the federal government removed naloxone from the prescription drug list in March 2016 to allow its emergency use, without a prescription, outside of hospital settings.^(16, 19) In a further move to make naloxone more accessible, the health Minister officially authorised naloxone nasal spray for non-prescription use in October 2016.⁽⁹¹⁾ Until then, only injectable naloxone had been approved in the country. Some provinces and territories (7 out of 13) have already implemented community-based take-home naloxone programmes, while others have undertaken regulatory changes to allow use by first responders.^(16, 19) Despite these developments, access to naloxone still varies from province to province, with cost (particularly for the nasal spray) reported as one of the barriers.⁽⁹²⁾

In Ontario, however, all pharmacies are eligible to dispense naloxone emergency kits free-of-charge, significantly increasing their accessibility.⁽¹⁹⁾ Additionally, earlier this year a Good Samaritan Act was introduced as a private members' bill in Parliament.⁽⁹³⁾ An essential step in dealing with Canada's overdose crisis, this bill has received widespread support across the country and, as of September 2016, had passed the first two readings and was in the 'Report' stage.

Finally, both countries have been taking steps to respond to the increase of prescription opiate dependence. In the US, the Centers for Disease Control and Prevention (CDC) released guidelines for prescribing opioids for chronic pain in 2016, representing an important step for improving prescriber education and pain prescribing practices in the country.⁽⁸⁵⁾ In Canada, the College of Physicians and Surgeons in at least four provinces (British Columbia, Nova Scotia, New Brunswick, and Newfoundland) are proceeding with initiatives to rein in opioid prescribing, including incorporating some of the CDC's 2016 guidelines.⁽⁹⁴⁾

Policy development for harm reduction

Although still refusing to mention the words 'harm reduction' in national policy and international forums, the US government is beginning to adopt more of a public health approach to drugs and continues to endorse harm reduction interventions.⁽¹⁵⁾ At the UNGASS on drugs in April 2016, for example, it specifically urged Member States to scale-up their public health responses to drugs and adopt evidence-based interventions such as OST and NSPs.⁽⁹⁵⁾ At the national level, the 2015 National Drug Control Strategy,⁽²⁴⁾ as well as the most recent HIV/AIDS⁽⁹⁶⁾ and viral hepatitis⁽³⁶⁾ strategies explicitly support the provision of OST and NSPs. The government has also demonstrated a renewed commitment to key populations, evidenced by the new US\$100 million PEPFAR fund for key populations (see funding section) announced in June 2016.⁽⁹⁷⁾

One significant development in relation to NSPs has been the amendment to the longstanding federal funding ban on these programmes, signed by President Barack Obama on December 18, 2015. The Consolidated Appropriations Act, 2016, as the provision is formally known, still prohibits the use of federal funds to purchase sterile needles or syringes to inject illegal drugs, but now allows federal funds to be used to support other facets of NSPs, such as HIV and HCV testing, naloxone training and provision, human resources, syringe disposal, human resources and syringe disposal.⁽¹³⁻¹⁵⁾



The twin epidemics of opioid use and overdose have also been driving American public policy towards a public health and harm reduction approach. These issues were a key focus for the US at the 59th Session of the Commission on Narcotic Drugs, in March 2016, and again at the UNGASS on drugs the following month. Since the *Global State* last reported, 13 US states have enacted some sort of Good Samaritan laws to protect people from arrest or prosecution when calling in an overdose, bringing the total number up to 37 states.⁽⁸⁷⁾ As of June 2016, all but three states (Kansas, Montana, Wyoming) had passed legislation designed to improve access to naloxone,⁽⁸⁹⁾ which has already resulted in 26,000 overdose reversals.⁽⁹⁰⁾ Finally, 24 states now have some form of medicinal cannabis legislation, and regulated markets for recreational cannabis use now exist in Alaska, Colorado, Oregon, Washington and the District of Columbia (Washington, DC).⁽¹⁵⁾

Following years of ideological opposition to harm reduction, Canada's new federal government has been vocal in its support of harm reduction in both national and international forums, including at the 59th Session of the Commission on Narcotic Drugs in March 2016. In a speech at this session, Canada described harm reduction as critical and announced its support not only of evidence-based harm reduction measures such as NSPs, but also – in a complete policy shift from the previous regime – supervised injection sites, stating that it anticipated more would be operating in the future.⁽⁹⁸⁾ The following month, at the UNGASS on drugs in New York, Canada's federal Health Minister publicly embraced harm reduction as a key pillar of the response to drugs, acknowledged the need to protect human rights and, making headlines worldwide, announced Canada's plan to legalise cannabis in 2017.⁽⁹⁹⁾

Following years of legal challenges, the Canadian government officially overturned the ban on heroin-assisted therapy (HAT) in September 2016.⁽²²⁾ Under the new regulations, physicians can prescribe pharmaceutical-grade heroin to patients for whom it is clinically indicated, including individuals who have tried other approaches, such as methadone and buprenorphine, without success. In response to the opioid overdose epidemic, the government also removed naloxone from the prescription drug list,^(16, 19) which enables over-the-counter provision and dramatically increases accessibility, and authorised the provision of nasal-spray naloxone (see overdose section).⁽⁹¹⁾ Alongside these developments, a Good Samaritan bill was introduced in Parliament and is currently before the House of Commons.⁽⁹³⁾ The bill

would amend the Controlled Drugs and Substances Act to give immunity from prosecution for the offences of simple possession of a controlled substance to anyone who calls 911 to report an overdose.

Civil society and advocacy developments for harm reduction

Civil society continues to be very active in the region, playing a strong role in advocating for harm reduction both regionally and internationally, and making significant accomplishments in the last two years. The 2016 UNGASS on drugs held in New York in April provided an unprecedented opportunity for regional civil society organisations to mobilise on drug policy reform, both at the national and international levels.⁽¹⁵⁾ In the US, the revival of the New York NGO Committee on drugs (NYNGOC) in preparation for the UNGASS was a major achievement for civil society engagement on drug policy issues and was instrumental in bringing a large number of geographically diverse organisations together.⁽¹⁵⁾ In terms of important policy development, the Harm Reduction Coalition worked closely with Congress and the Obama Administration to revise the longstanding federal funding ban for NSPs in the country.

In Canada, the new federal government's explicit support for harm reduction at the national level and in international forums are due in part to the campaign and advocacy efforts of civil society, many of whom have had the opportunity to meet with the Health Minister and her office to advocate for harm reduction in Canada and globally.⁽¹⁶⁾ In 2015, a national Working Group on Best Practice for Harm Reduction Programs in Canada, made up of people who use drugs, service providers, policy makers and researchers, produced the *Best Practice Recommendations for Canadian Harm Reduction Programs that Provide Service to People Who Use Drugs and are at Risk for HIV, HCV, and Other Harms: Part 2*, to help NSPs and other harm reduction programmes across the country improve service delivery to people who use drugs.⁽⁵⁰⁾

Given that harm reduction and drug policy advocacy and services were so under-resourced under the previous Canadian federal government, civil society has identified funding as a major advocacy priority in the coming years.^(16, 19) At the same time, urging the federal government to explicitly refer to 'harm reduction' as one of the key pillars of a new national drug policy will be another principal advocacy objective.⁽¹⁶⁾

Funding developments for harm reduction

One of the most important funding developments in the region since 2014 has been the modification to the federal funding ban on NSPs signed by the President on 18 December 2016. The revised policy still prohibits the use of federal funds to purchase sterile needles and syringes to inject illegal drugs, but makes allowances for these funds to be used to contribute to NSPs in other ways based on evidence of a demonstrated need by the state or local health department, and in consultation with the CDC.⁽¹³⁾ The change in the funding ban has allowed for new federal funding options and small programmes are being pushed to collaborate or merge with larger organisations to deliver broader health care services.⁽¹⁵⁾

Another noteworthy funding development in the United States was the PEPFAR announcement at the UN High Level Meeting on ending AIDS held in New York in June 2016, about the creation of a US\$100 million Key Populations Investment Fund. The Fund, which demonstrates the country's renewed commitment to key populations, will work to address the complex dynamics driving stigma and discrimination in order to expand access to evidence-based HIV prevention and treatment services for key populations.⁽⁹⁷⁾

Canada's National Anti-Drugs Strategy, a hangover from the previous federal government, was allocated CA\$515.9 million for 2012-2017.⁽¹⁰⁰⁾ With harm reduction entirely absent from this Strategy, however, funds could not be allocated for this purpose, and the majority (between 40%⁽¹⁰⁰⁾ and 70%⁽¹⁰¹⁾) has been spent on enforcement. Thankfully, this Strategy expires in March 2017 and it is hoped that funding allocations will be revised going forward. Meanwhile, with health care being a provincial mandate, harm reduction services are typically funded by provincial and territorial governments.⁽¹⁶⁾ For example, the Ontario Harm Reduction Distribution Program, which is funded by the province of Ontario's Hepatitis C Secretariat, Ministry of Health and Long-term Care, provides harm reduction supplies and other resources to needle and syringe programs across Ontario.⁽¹⁰²⁾ But while provincial and territorial governments are responsible for health care in their respective jurisdictions, the federal government holds responsibility for ensuring the availability of health services for specific populations, including Indigenous people and people incarcerated in federal prisons.⁽⁷⁰⁾ Considering these two populations are currently both the most in need of harm reduction services and less

likely to access them, the federal government should urgently devote more resources, including funding, to ensure that these key populations' fundamental rights are being fulfilled.



References

1. Challacombe L (2016) *The epidemiology of HIV in people who inject drugs in Canada*. Canada.
2. Public Health Agency of Canada (2015) 'Summary Estimates of HIV Incidence, Prevalence and Proportion Undiagnosed in Canada, 2014'. Available from: <http://www.catie.ca/sites/default/files/2014-HIV-Estimates-in-Canada-EN.pdf>.
3. Public Health Agency of Canada (2012) *Summary of Key Findings from I-Track Phase 3 (2010-2012)*. Canada.
4. UNAIDS (2016) *Do No Harm: Health, Human Rights and People Who Use Drugs*. Geneva.
5. Lansky A, Finlayson T, Holtzman C et al. (2014) 'Estimating the number of persons who inject drugs in the United States by meta-analysis to calculate national rates of HIV and hepatitis C virus infections.' *PLoS ONE* 9(5).
6. Nelson PK, Mathers BM, Cowie B et al. (2011) 'Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews.' *The Lancet* 378(9791):571-83.
7. Jarlais D, Guardino V, Nugent A et al (2012) 'The Dave Purchase memorial 2012 National Survey of Syringe Exchange programs: Summary of results'. Available from: http://www.nasen.org/site_media/files/bis2012/2012-survey-results-presentation-final.pptx.
8. Centre for Disease Control and Prevention (2015) *HIV Surveillance Report 2015*. Georgia, US
9. UNODC (2015) *World Drug Report*. Vienna.
10. UNODC (2016) *World Drug Report*. Vienna.
11. North American Syringe Exchange Network (2016) 'Directory of Syringe Exchange Programs'. Available from: <https://nasen.org/directory>.
12. Frieden TR, Foti KE, Mermin J (2015) 'Applying Public Health Principles to the HIV Epidemic — How Are We Doing?' *New England Journal of Medicine* 373(23):2281-87.
13. www.congress.gov (2015) 'Public Law No: 114-113 (12/18/2015)'. Available from: <https://www.congress.gov/bill/114th-congress/house-bill/2029/text>.
14. Weinmeyer R (2016) 'Needle Exchange Programs' Status in US Politics.' *AMA J Ethics* 18(3):252-57.
15. Phillips B (2016) *Global State of Harm Reduction survey response 2016*. 10 May 2016, Harm Reduction International: Harm Reduction Coalition.
16. Ka Hon Chu S (2016) *Global State of Harm Reduction survey response 2016*. 17 May 2016, Harm Reduction International: Aids Law.
17. Beletsky L et al.(2011) 'The roles of law, client race and program visibility in shaping police interference with the operation of US syringe exchange programs.' *Addiction* 106(2):357-65.
18. Beletsky L, Grau LE, White E et al. (2015) 'Police Encounters Among Needle Exchange Clients in Baltimore: Drug Law Enforcement as a Structural Determinant of Health.' *American Journal of Public Health* 105(9):1872-79.
19. Maghsoudi N (2016) *Global State of Harm Reduction survey response 2016*. 4 August 2014, Harm Reduction International: International Centre for Science in Drug Policy.
20. Fischer B, Kurdyak P, Goldner E et al. (2016) 'Treatment of prescription opioid disorders in Canada: looking at the 'other epidemic?' *Substance Abuse Treatment, Prevention, and Policy* 11(1):12.
21. Eibl JK, Morin-Taus KA, Marsh DC (2016) 'Too much or never enough: a response to Treatment of opioid disorders in Canada: looking at the 'other epidemic.' *Subst Abuse Treat Prev Policy* 11(1):33.
22. The Canadian Press (2016) 'Canada now allows prescription heroin in severe opioid addiction'. Available from: <http://www.cbc.ca/news/canada/british-columbia/canada-now-allows-prescription-heroin-in-severe-opioid-addiction-1.3753312>.
23. Canada Gazette (2016) 'Controlled Drugs and Substances Act'. Available from: <http://www.gazette.gc.ca/rp-pr/p2/2016/2016-09-07/html/sor-dors239-eng.php>.
24. Executive Office of the President of the United States (2015) 'National Drug Control Strategy 2015'. Available from: https://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/2015_national_drug_control_strategy.pdf.
25. SAMHSA (2012) *National Survey of Substance Abuse Treatment Services (N-SSATS): 2012. Data on Substance Abuse Treatment*. Maryland, US.
26. Park-Lee E, Lipari RN, Hedden SL (2016) 'Receipt of Services for Substance Use and Mental Health Issues among Adults: Results from the 2015 National Survey on Drug Use and Health'. Available from: <http://www.samhsa.gov/data/sites/default/files/NSDUH-ServiceUseAdult-2015/NSDUH-ServiceUseAdult-2015/NSDUH-ServiceUseAdult-2015.pdf>.
27. Harm Reduction Coalition (2016) *Alternatives to Public Injecting*. New York, US
28. Politico (2016) 'Council, de Blasio administration to study supervised injection facilities'. Available from: <http://www.politico.com/states/new-york/city-hall/story/2016/09/council-de-blasio-administration-to-study-supervised-injection-facilities-105869#ixzz4LYf2w6>.
29. National Academies of Sciences, Engineering and Medicine (2016) *Eliminating the public health problem of hepatitis C and C in the United States: Phase one report*. Washington D.C.
30. Holmberg S (2015) 'Hepatitis C in the United States: Emerging Trends in Incidence and Mortality. American Public Health Association, Special Session: The changing epidemiology of viral hepatitis C emerging trends and disparities'. Available from: <https://apha.confex.com/apha/143am/webprogram/Paper338437.html>.
31. Spach D (2016) 'HCV Epidemic in the United States'. Available from: <http://www.hepatitis.cw.edu/go/screening-diagnosis/epidemiology-us/core-concept/all>.
32. The National center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Division of HIV/AIDS Prevention (2016) *Hepatitis CDC Fact Sheet*. Georgia, US
33. US Department of Health and Human Services (HHS) Office of the Assistant Secretary for Health (2013) 'Technical Consultation: Hepatitis C Virus Infection in Young Persons Who Inject Drugs. February 26-27, 2013, Consultation Report'. Available from: <https://www.aids.gov/pdf/hcv-and-young-pwuid-consultation-report.pdf>.
34. Zibell JE, Iqbal K, Patel RC (2015) 'Increases in hepatitis C virus infection related to injection drug use among persons aged ≤ 30 years – Kentucky, Tennessee, Virginia, and West Virginia, 2006-2012.' *Morbidity and Mortality Weekly Report* 64(17):453-58.
35. Suryaprasad AG, White JZ, Xu F et al. (2014) 'Emerging epidemic of hepatitis C virus infections among young nonurban persons who inject drugs in the United States, 2006-2012.' *Clinical Infectious Diseases* 59(10):1411-19.
36. US Department of Health and Human Services (2014) *Action plan for the prevention, care and treatment of viral hepatitis: 2014-16*. US
37. Myers RP, Krajdén M, Bilodeau M, et al. (2014) 'Burden of disease and cost of chronic hepatitis C infection in Canada.' *Canadian Journal of Gastroenterology and Hepatology* 28(5):243-50.
38. Public Health Agency of Canada (2016) *Report on Hepatitis B and C in Canada: 2013*. Ottawa.
39. Public Health Agency of Canada (2009) *Epidemiology of Acute Hepatitis C Infection in Canada: Results from the Enhanced Hepatitis Strain Surveillance System (EHSSS)*. Ottawa.
40. Barua S, Greenwald R, Grebely J et al. (2015) 'Restrictions for Medicaid Reimbursement of Sofosbuvir for the Treatment of Hepatitis C Virus Infection in the United States.' *Annals of Internal Medicine* 163(3):215-23.
41. Schmidt and Clark LLP (2016) 'Sovaldi lawsuit'. Available from: <https://www.schmidtandclark.com/sovaldi-lawsuit>.
42. Wolfe D, Luhmann N, Harris M, et al. (2015) 'Human rights and access to hepatitis C treatment for people who inject drugs.' *International Journal of Drug Policy* 26(11):1072-80.
43. Public Health Agency of Canada (2014) 'I-Track: Enhanced Surveillance of HIV, Hepatitis C and associated risk behaviours among people who inject drugs in Canada. Phase 2 Report'. Available from: http://www.catie.ca/sites/default/files/PHAC-ITrack-EN-FINAL_2014.pdf.
44. Myles A, Mugford GJ, Zhao J et al. (2011) 'Physicians' attitudes and practice toward treating injection drug users with hepatitis C: results from a national specialist survey in Canada.' *Canadian Journal of Gastroenterology* 25(3):135-39.
45. Kamarulzaman A, Altice FL (2015) 'The Challenges in Managing HIV in People Who Use Drugs.' *Current opinion in infectious diseases* 28(1):10-16.
46. WHO, UNODC, UNAIDS (2008) 'Policy Guidelines for Collaborative TB and HIV Services for Injecting and Other Drugs Users: An Integrated Approach'. Available from: http://apps.who.int/iris/bitstream/10665/43937/1/9789241596930_eng.pdf.
47. National Centre for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (2015) 'HIV and Injection Drug Use'. Available from: <http://www.cdc.gov/hiv/pdf/risk/cdc-hiv-idu-fact-sheet.pdf>.
48. UNAIDS (2016) *Prevention Gap Report*. Geneva.
49. Public Health Agency of Canada (2015) *Summary Estimates of HIV Incidence, Prevalence and Proportion Undiagnosed in Canada, 2014*. Canada.
50. Strike C, Watson TM, Gohil G et al. (2015) *The Best Practice Recommendations for Canadian Harm Reduction Programs that Provide Service to people Who Use Drugs and at Risk for HIV, HCV and Other Harms: Part 2*. Toronto.
51. Walmsley R (2015) *World Prison Population List (eleventh edition)*. Essex.
52. Human Rights Watch, American Civil Liberties Union (2016) 'Every 25 Seconds: The Human Toll of Criminalizing Drugs Use in the United States'. Available from: https://www.aclu.org/sites/default/files/field_document/aclu_hr_wj_report_every25seconds.pdf.
53. Carson AE (2015) 'Prisoners in 2014'. Available from: <http://www.bjs.gov/content/pub/pdf/p14.pdf>.
54. Whitten L (2011) 'More opioid replacement therapy in correctional facilities might yield public safety and health benefits'. Available from: <https://www.drugabuse.gov/news-events/nida-notes/2011/07/prison-use-medications-opioid-addiction-remains-low>.
55. Drug Policy Alliance (2016) 'Race and the Drug War'. Available from: <http://www.drugpolicy.org/race-and-drug-war>.

56. Office of the Correctional Investigator (2016) 'Aboriginal Issues'. Available from: <http://www.oci-bec.gc.ca/cnt/priorities-priorites/aboriginals-autochtones-eng.aspx>.
57. Marshall SG (2015) 'Canadian Drug Policy and the Reproduction of Indigenous Inequalities.' *The International Indigenous Policy Journal* 6(1).
58. Office of the Correctional Investigator (2015) *Annual Report 2014-2015*. Canada.
59. Genberg BL, Astemborski J, Vlahov D et al. (2015) 'Incarceration and injection drug use in Baltimore, Maryland.' *Addiction* 110(7):1152-59.
60. EMCDDA (2012) *Prisons and drugs in Europe: The problem and responses*. Lisbon.
61. Maruschak L (2015) 'HIV in Prisons, 2001-2010 (revised March 24, 2015)'. Available from: <http://www.bjs.gov/content/pub/pdf/hivp10.pdf>.
62. Centres for Disease Control and Prevention (2014) Table 42. Tuberculosis Cases and Percentages by Residence in and Types of Correctional Facilities'. Available from: http://www.cdc.gov/tb/statistics/reports/2014/pdfs/2014-surveillance-report_table42.pdf.
63. Centres for Disease Control and Prevention (2013) 'Hepatitis C and Incarceration, Publication No. 21-1306'. Available from: <http://www.cdc.gov/hepatitis/HCV/PDFs/HepCIncarcerationFactSheet-BW.pdf>.
64. Public Health Agency of Canada (2014) 'Chapter 1 - National HIV prevalence and incidence estimates for 2011'. Available from: http://www.phac-aspc.gc.ca/aids/aida/publication/epi/2010/pdf/EN_Chapter1_Web.pdf.
65. Zakaria D, Thompson JM, Jarvis A, Smith, J (2010) *Testing and Treatment for HIV and HCV Infections among Canadian Federal Inmates*. Canada.
66. Rich JD, McKenzie M, Larney S et al. (2015) 'Methadone continuation versus forced withdrawal on incarceration in a combined US prison and jail: a randomised, open-label trial.' *The Lancet* 386(9991):350-59.
67. Watson T (2015) 'Time to rethink our approach to drugs in prisons: Barriers to in-prison substance use treatment and harm reduction programmes'. Available from: <http://drugpolicy.ca/blog/2015/03/time-to-rethink-our-approach-to-drugs-in-prisons-barriers-to-in-prison-substance-use-treatment-and-harm-reduction-programs>.
68. Solomon L, Montague BT, Beckwith CG et al. (2014) 'Survey Finds That Many Prisons And Jails Have Room To Improve HIV Testing And Coordination Of Postrelease Treatment.' *Health Affairs (Project Hope)* 33(3):434-42.
69. Human Rights Watch (2016) 'Paying the Price: Failure to Deliver HIV Services in Louisiana Parish Jails'. Available from: <http://www.hivlawandpolicy.org/sites/www.hivlawandpolicy.org/files/Paying%20the%20Price-%20Failure%20to%20Deliver%20HIV%20Services%20in%20LA%20Parish%20Jails.pdf>.
70. UNAIDS (2016) *Global AIDS Response Progress Reporting: Canada*. Geneva.
71. Canadian HIV/AIDS Legal Network (2016) 'Landmark Resolution Marks Progress for People Living with HIV in Prison'. Available from: <http://www.aidslaw.ca/site/landmark-resolution-marks-progress-for-people-living-with-hiv-in-prison/?lang=en>.
72. Varan AK, Mercer DW, Stein MS, Spaulding AC (2014) 'Hepatitis C Seroprevalence Among Prison Inmates Since 2001: Still High but Declining.' *Public Health Reports* 129(2):187-95.
73. He T, Li K, Roberts MS et al. (2016) 'Prevention of Hepatitis C by Screening and Treatment in US Prisons.' *Annals of Internal Medicine* 164(2):84-92.
74. Kouyoumdjian FG, McIsaac KE. (2015) 'Persons in correctional facilities in Canada: A key population for hepatitis C prevention and control.' *Canadian Journal of Public Health* 106(6):e454-56.
75. Canadian Medical Association Journal (2015) 'Federal inmates treated for hep C drop 29%.' *Canadian Medical Association Journal* Early release, published 2 November 2015.
76. Prison Legal News (2016) 'Condoms Now Available to Prisoners in Three States'. Available from: <https://www.prisonlegalnews.org/news/2016/sep/2/condoms-now-available-prisoners-three-states>.
77. Howlett K, Taber J (2016) 'Naloxone to be immediately distributed to release inmates in Ontario'. Available from: <http://www.theglobeandmail.com/news/national/naloxone-to-be-immediately-distributed-to-release-inmates-in-ontario/article30750481>.
78. Harm Reduction Coalition (2016) 'Bay Area DOPE'. Available from: <http://harmreduction.org/issues/overdose-prevention/bay-area-dope>.
79. Rudd R, Aleshire N, Zibbell J, Gladden M (2016) 'Increases in Drug and Opioid Overdose Deaths - United States, 2000-2014.' *Morbidity and Mortality Weekly Report* 64(50).
80. Britten (2016) 'Overdose deaths up from 40 a month in 2015 to 64 a month this years'. Available from: <http://www.cbc.ca/news/canada/british-columbia/opioid-overdose-deaths-emergency-1.3580212>.
81. Howlett K, Giovannetti J, Vaderklippe N, Perreux L (2016) 'A Killer High: How Canada got addicted to fentanyl'. Available from: <http://www.theglobeandmail.com/news/investigations/a-killer-high-how-canada-got-addicted-to-fentanyl/article29570025>.
82. Dhillon S, Howlett K (2016) 'B.C. declares public health emergency as overdoses surge again'. Available from: <http://www.theglobeandmail.com/news/british-columbia/overdoses-prompt-bc-to-declare-public-health-emergency/article29631552>.
83. International Narcotics Control Board (2013) 'Narcotic Drugs: Estimated World Requirements for 2013'. Available from: http://www.incb.org/documents/Narcotic-Drugs/Technical-Publications/2012/Narcotic_Drugs_Report_2012.pdf.
84. Muhuri P, Gfroerer J, Davies M (2013) 'Associations of nonmedical pain reliever use and initiation of heroin use in the United States'. Available from: <http://archive.samhsa.gov/data/2k13/DataReview/DR006/nonmedical-pain-reliever-use-2013.htm>.
85. Nora D, Volkow M (2016) 'What science tells us about opioid abuse and addiction'. Available from: <https://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2016/what-science-tells-us-about-opioid-abuse-addiction>.
86. Dias M (2016) 'Fentanyl Overdoses in North America: Signaling the Importance of Prescription Monitoring, Treatment Access, and Addiction Prevention'. Available from: <https://voicesinbioethics.org/2016/04/25/fentanyl-overdoses-in-north-america-signaling-the-importance-of-prescription-monitoring-treatment-access-and-addiction-prevention>.
87. National Conference of State Legislatures (2016) 'Drug Overdose Immunity and Good Samaritan Laws'. Available from: <http://www.ncsl.org/research/civil-and-criminal-justice/drug-overdose-immunity-good-samaritan-laws.aspx>.
88. National Institute of Drug Abuse (2015) 'FDA approves naloxone nasal spray to reverse opioid overdose'. Available from: <https://www.drugabuse.gov/news-events/news-releases/2015/11/fda-approves-naloxone-nasal-spray-to-reverse-opioid-overdose>.
89. The Network for Public Health Law (2016) 'Legal Interventions to Reduce Overdose Mortality: Naloxone Access and Overdose Good Samaritan Laws'. Available from: https://www.networkforphl.org/_asset/qz5pvn/naloxone_FINAL.pdf.
90. Wheeler E, Jones S, Gilbert M, Davidson P (2015) 'Opioid overdose prevention programs providing naloxone to laypersons - United States.' *Morbidity and Mortality Weekly Report* 64(23).
91. The Globe and Mail (2016) 'Health Canada approves non-prescription naloxone nasal spray'. Available from: <http://www.theglobeandmail.com/news/politics/health-canada-approves-non-prescription-naloxone-nasal-spray/article32222707>.
92. Dimoff A (2016) 'High price of naloxone nasal spray makes distribution of vital drug difficult'. Available from: <http://www.cbc.ca/news/canada/british-columbia/costly-naloxone-nasal-spray-1.3675243>.
93. House of Commons Canada (2015) 'Bill C-224. An Act to amend the controlled Drugs and Substances Act (assistance - drug overdose). First Session, Forty-second Parliament, 64-65 Elizabeth II, 2015-2015'. Available from: <http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=8113043>.
94. The Globe and Mail (2016) 'Canadian doctor groups back stricter US guidelines on opioid use'. Available from: <http://www.theglobeandmail.com/news/national/canadian-doctor-groups-back-stricter-us-guidelines-on-opioid-use/article29935472>.
95. cndblog.org. (2016) 'UNGASS Roundtable 1: Demand reduction and related measures'. Available from: <http://cndblog.org/2016/04/demand-reduction-and-related-measures-round-table-1>.
96. The White House (2015) 'National HIV/AIDS Strategy for the United States'. Available from: <https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf>.
97. PEPFAR (2016) 'PEPFAR Announces New \$100 Million Investment Fund to Expand Access to Proven HIV Prevention and Treatment Services for Key Populations'. Available from: <http://www.pepfar.gov/press/releases/258269.htm>.
98. Government of Canada (2016) 'Notes for an Address by Hilary Geller during the General Debate on the Special Session of the UN General Assembly on the World Drug Problem at the 59th Session of the United Nations Commission on Narcotic Drugs'. Available from: https://www.unodc.org/documents/commissions/CND/CND_Sessions/CND_59/Statements_15_March_AM/Canada.pdf.
99. Government of Canada (2016) 'Plenary Statement for the Honourable Jane Philpott Minister of Health - UNGASS on the World Drug problem'. Available from: <http://news.gc.ca/web/article-en.do?nid=1054489>.
100. Department of Justice (2012) 'National Anti-Drug Strategy evaluation - Final Report'. Available from: <http://www.justice.gc.ca/eng/rp-pr/cp-pm/eval/rep-rap/12/nas-sna/p1.html>.
101. Debeck K, Wood E, Montaner J, Keer T (2009) 'Canada's new federal 'National Anti-Drug Strategy': an informal audit of reported funding allocation.' *International Journal of Drug Policy* 20(2):188-91.
102. Ontario Harm Reduction Distribution Program (2016) 'About us'. Available from: <http://www.ohrdp.ca/about-us>.
103. BC Centre for Disease Control (2016) 'Public health emergency in BC'. Available from: <http://www.bccdc.ca/about/news-stories/stories/public-health-emergency-in-bc>.