ACCESS TO HCV TREATMENT IN FEDERAL INSTITUTIONS
This resource was created by CTAC. It would not have been possible without the valuable contributions/reviews from both national and provincial service providers including: Prisoners with HIV/AIDS Support Action Network (PASAN), CATIE, John Howard Society, Canadian HIV/AIDS Legal Network, and the Correctional Service of Canada.

Funding was from the Public Health Agency of Canada. The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.
# Table of Contents

Introduction

Canadian Prison Context 3
  Relationship Between Public and Prison Health 3
Prevalence and Transmission of HCV Within the Prison Setting 5
Traditional Methods of Treatment for Incarcerated Individuals 7
  Screening 7
  Treatment 8
    Continuity of Care 9
    Budgetary Challenges Associated with HCV in the Prison Context 9
Harm Reduction 11
Social Determinants of Health 13
  Mental Health and Problematic Substance Use 13
  Gender 13
New Directive 15
Recommendations 16
  Harm Reduction 16
  Capacity-Building 17
    Effect of Staffing Capacity/Knowledge on Confidentiality 17
Concluding Statement 19
“On any given day during the 2015-16 fiscal year approximately 14,631 individuals were held in federal custody by the Correctional Service of Canada (CSC). While the national HCV burden among Canadians is approximately 1%, the prevalence of HCV in Canadian correctional facilities is estimated to be much higher.”
A
ccess to treatment, for those with the Hepatitis C virus (HCV), continues to be a major problem in Canada. HCV impacts between 250,000-300,000 Canadians, among whom at least 44% are undiagnosed and untreated.1 Multi-faceted and complex, the narrative of HCV highlights many inequities in our public health system. There is a cure for HCV, but it is very expensive ($55,000-$75,000 per 12-week course of treatment based on the retail price within Canada at the end of 2016). If left untreated, HCV can lead to cirrhosis, liver disease, liver transplant, and liver cancer; the Canadian Liver Foundation and Action Hepatitis Canada estimate the financial impact of failing to treat HCV to be in excess of $300,000 per patient.

Every year within Canada, roughly a quarter of a million people are admitted into the corrections system, as a whole.2 Given that the focus of this paper revolves around the federal prison population, it is important to note that, on any given day during the 2015-16 fiscal year approximately 14, 631 individuals were held in federal custody by the Correctional Service of Canada (CSC).3 While the national HCV burden among Canadians is approximately 1%, the prevalence of HCV in Canadian correctional facilities is estimated to be between 20 and 40%, or twenty to forty times more than the national average.4 Accordingly, Corrections Service Canada (CSC) faces an even greater challenge than other Provincial, Territorial, and National formularies and public reimbursement programs when treating patients infected with HCV.

The early 2000s saw a spike in CSC’s bill for hepatitis C drug treatment, with an increase of almost sevenfold between 2005 and 2010. This trend was reversed somewhat in 2011, as CSC saw a 40% reduction in hepatitis C treatment costs. Although CSC credited bulk purchasing of hepatitis C medications at discounted rates for this cost reduction, others questioned whether screening and treatment were being effectively implemented as the number of diagnosed cases decreased only 8% and the prevalence dropped only 3%.5 Regardless of the cause, the reduction in costs for hepatitis C treatment would be short-lived, as a new generation of direct acting antiviral hepatitis C drugs with much higher curative capacity, but also far higher prices, drastically shifted the costs associated with the old class of medications. Over the course of the past few years, critics of CSC’s approach to treatment access have indicated that CSC appears to be restricting access to the latest hepatitis C drugs, by treating them as “exceptional medications”, in order to control treatment costs.6 Critics also suggest that the prescribing of these drugs does not lie with the doctor, but with an administrative decision-maker who may not have the resources to review cases in a timely manner.7 The 2014-15 Annual Report of the Office of the Correctional Investigator indicated that, although the National CSC Formulary appeared to be in line with public drug plans, there were some notable issues present. The Office of the Correctional Investigator notes that, “Treatment options listed on the Formulary and physician autonomy were found to be restricted often as a result of ill-defined security, administrative or operational concerns.”8

Traditionally, the Canadian Agency for Drugs and Technologies in Health (CADTH) has suggested that any patient with HCV should be treated, regardless of disease-progression or liver health.9 This is important because the CSC themselves have acknowledged their role to provide for the health of prisoners as guided by the decisions of CADTH and other formularies.10 However, the number of prisoners treated for HCV has dropped by more than 29% while the federal prison population has increased by 25%.11 The formularies of the CSC are operating within a more restrictive system and with a higher burden. As a result of cost-containment strategies, CSC may in fact be delaying treatment for as many as 1750 federal prisoners infected with HCV.12

Given this fiscal climate, it was a great surprise that, in late 2016, CSC informed its Infectious Disease Specialists that treatment may be considered for all those prisoners infected with HCV, regardless of their fibrosis score. A fibrosis score measures the level of scarring to the liver, or cirrhosis, caused by disease. The greater the fibrosis score, the more severe the liver damage is likely to be.13 This is a massive leap forward for HCV treatment access, given that many of the public drug plans, across Canada, are seeking to contain cost by limiting public treatment coverage to those with a Fibrosis score of at least 2 or higher. For example, the public health plan for the province of Alberta (which is administered through a contract with Alberta Blue Cross) lists hepatitis C drugs under Restricted Access Benefits. Under the reimbursement criteria for these benefits, an individual must meet a certain number of criteria AND have a Fibrosis Stage of at least F2 to have their hepatitis C drugs covered by the Alberta government.14 Therefore, to have CSC propose that fibrosis score will be immaterial to the consideration of treatment is an enormous step forward. However, before addressing this point, it is important to step back and look at the current landscape of HCV care within the correctional system, and the traditional way that CSC has approached HIV/HCV treatment. From there, we can better understand the directive and discuss how it can be used, in conjunction with some other measures, as a way forward towards the eradication of HCV within Canadian federal institutions.
Average CSC per capita healthcare expenditure in 2013-14:

$9,700 per man
$26,200 per woman

CSC healthcare professionals in 2013-14:

over 1400
including:

390 psychologists
943 nurses

CSC health services expenditure in 2012-13:

$216.7m

$20M was spent on prescription drugs
The topic of healthcare for those who are incarcerated is often either unpopular, or overlooked, by the public at large. However, “Prisons act as incubators for tuberculosis and HIV, because they are associated with higher levels of infection than in the surrounding populations, yet many countries have parallel and vertical systems, with fragmented policy responses to these interlinked issues – prisons, HIV, viral hepatitis, and tuberculosis – and interruptions of surveillance and treatment during transitions.”16

Prisons represent a unique opportunity to begin to address the HCV virus in a multitude of ways, from the behaviours that increase the likelihood of disease transmission (e.g.: needle-sharing), to the initiation of treatment and the provision of education/resources to promote proper care/adherence to treatment in order to clear HCV infection. While prisoner health is often seen as being apart from broader community health, the World Health Organization argues, “The health of prisoners is an issue of public health concern. Everyone in the prison environment – prisoners, prison staff, or their family members – benefits from enhancing the health of prisoners and reducing the incidence of communicable disease.”17 Any infectious disease, such as HCV, is a pressing public health concern, as there is often a high turnover rate when it comes to the prisoner population, especially in provincial facilities. The ramifications of someone entering the correctional system, acquiring HCV, not having the time or ability to access treatment, and then being released into the general population are staggering.

If behaviours that lead to an increased risk of HCV are coupled with a lack of treatment and harm reduction initiatives, the risk of a viral epidemic is greatly enhanced, both within the facility and out in the community, “…HIV-positive people and at-risk individuals move frequently between prisons and their home communities. Most prisoners will return to their home communities within a few years. The high degree of mobility between prison and community means that communicable diseases and related illnesses transmitted or exacerbated in prison do not remain there. When people living with HIV and HCV are released from incarceration, prison health issues necessarily become community health issues…”18 However, prisons do not have to be incubators for infection. Prison presents a unique opportunity to be able to halt and cure infectious disease. They also allow for the opportunity to increase access to treatment for those populations which are most vulnerable, or traditionally hard to reach, and can improve the health of those inside prison and out within the community.

Dealing with the HCV epidemic is but one of CSC’s many competing priorities that have a large effect on the annual budget. While much has been made of the impact of an aging population on Canada’s healthcare system as a whole, this trend is particularly acute within the prison system. Prison facilities, in general, are dealing with an increased rate of chronic health conditions among federal prisoners. The Office of the Correctional Investigator noted that, by 2014-15, the proportion of incoming prisoners over 50 years of age had grown to 25% of the total prisoner population, up from less than 20% in 2010-2011.19 An aging prisoner population, in general, will lead to a growing number of chronic conditions that will need some sort of management, and an increase in the dollar amount needed to support said management.
“In Canada, there is a growing body of evidence that many individuals are not just entering prisons with hepatitis C but are, in fact, contracting blood-borne infections while in custody.”
Prevalence and Transmission of HCV Within the Prison Setting

HCV is endemic within the prison population and has infection rates that are often much higher than that of HIV. For example, within the United States, Macalino et al. (2004a) estimates that 20% to 40% of the 1.8 million prisoners in the United States are infected with HCV. In Canada, there is a growing body of evidence that many individuals are not just entering prisons with hepatitis C but are, in fact, contracting blood-borne infections while in custody. For example, the rate of infection for hepatitis C within men held in federal custody, was 16 infections per 1000 person-years in 2007. Infection rates are not consistent within the prison population as a whole, and certain groups experience an increased incidence of HCV. According to Kouyoundjian et al (2016), studies done within Canada, the United States, and Australian prisons show that the prevalence of HCV in women (25.3% to 67%) tends to be far greater than among men (4% to 39.4%).

Previous imprisonment has also been reported as a risk factor for HCV infection. The odds of HCV infection increases with the frequency of incarceration, duration of imprisonment, and time between release and re-incarceration. In a 2004 study by Skoretz et al., individuals who were incarcerated more than five times were significantly more likely to become HCV positive (odds ratio of 21.7). The chance of HCV positivity gradually increases with each additional month spent in prison. Individuals re-incarcerated less than five years after their release show an odds ratio of 23 and a positivity value of 76.7% for HCV infection. This increased risk is primarily the function of prisoners continuing to engage in high-risk injecting practices, such as sharing injection drug use (IDU) paraphernalia with a large and homogeneous cohort of prisoners.

Within the prison environment, injection drug use puts an individual at high risk of coming into contact with HCV. Restrictions on needle access forces prisoners to create makeshift injection equipment (“rigs”), or to smuggle them into correctional facilities, thus rendering them incredibly scarce. Limiting access does not, however, decrease demand, with injection drug use rates, “...ranging from 2% to 38% in Europe, 34% in Canada, and up to 55% in Australia...” The scarcity of needles needed for injection drug use has resulted in sharing of needles and the opportunity for HCV to be easily passed. “Because it is more difficult to smuggle needles into prisons than it is to smuggle in drugs, needles are typically scarce. As a result, prisoners who inject drugs share and reuse syringes out of necessity. A needle may circulate among (often large) numbers of people who inject drugs, or be hidden in a commonly accessible location where prisoners can use it as necessary.”

Injection drug use, and the sharing of syringes, remains an issue within the correctional setting. It’s a behaviour that is not likely to cease at any time in the near future. This point will come up again within the harm reduction portions (both what is happening currently and recommendations in terms of harm reduction) of this paper.
“HCV screening is offered to all prisoners on a voluntary basis, and will usually be conducted by a contracted public health nurse, or prison health unit in-house.”
Traditional Methods of Treatment for Incarcerated Individuals

Correctional Services of Canada (CSC) provides essential health services, including the provision of prescription drugs, to all federal prisoners. Generally, it is the institution or a regional pharmacy and therapeutics committee that decides which medications are covered. CSC’s National Drug Formulary is largely comparable and in line with publicly funded drug programs. Where required, CSC will use the appropriate provincial formulary to guide the decision. In accordance with Standards for Health Services, specifically Standard 414: Pharmaceutical Services, “all prescribed medications shall be dispensed/administered in an efficient and effective manner by qualified professionals in accordance with relevant legislation.” Health care providers face many difficulties managing the epidemic of HCV in prisons. The money allocated by the CSC for HCV treatment has been largely insufficient, a problem that has become more acute since the introduction of the newer, more costly class of hepatitis C drugs. Usually, CSC has a fixed sum allocated for hepatitis C treatment, and there are a fixed number of patients each penitentiary can treat and provide drugs for accordingly.

HCV screening is offered to all prisoners on a voluntary basis, and will usually be conducted by a contracted public health nurse, or the prison health unit in-house. In 2013, about 80% of people in custody received HCV screening during admission to federal correctional services. “In federal facilities, screening rates for tuberculosis and blood-borne infections are high, with recent data revealing that more than 70% of persons were screened for HIV, hepatitis C, and tuberculosis during their current incarceration. Screening for blood-borne infections might occur less frequently in provincial facilities, which could explain a relatively high proportion of persons not knowing about their HIV and hepatitis C infection status.” Even though HCV screening is done upon admission to the correctional facility, there has been some criticism within the literature as to whether the rigour of hepatitis C monitoring and follow-up, within the Canadian prison system, has suffered in recent years due to staffing challenges and budgetary restrictions. However, despite this controversy around the actual reporting/surveillance follow-up with prisoners within the correctional system, CSC reported within their 2015-16 Departmental Performance report that, “CSC streamlined health screening at admission to improve efficiency and a total of 96.2 percent of newly admitted prisoners voluntarily received infectious disease screening for blood-borne and sexually transmitted infections at intake.”
Healthcare within the prison system is of utmost importance because many prisoners represent traditionally underserved populations, and the accumulation of poor health outcomes and disease incidence in Canadian prisons will ultimately impact the health of the communities they return to. As noted earlier within this paper, the prison population continues to grow, and so is the incidence of chronic disease. For example, in 1997, 20% to 26% of all HIV-positive people in the United States passed through a correctional facility. This has put enormous pressure on the prison system. However, since many vulnerable populations flow through the prison system, this is one point where there is an ability to reach out to these populations and provide them with much needed health services, such as support programming and treatment programs, like antiretroviral therapy (ART). “For people with HIV who are marginalised from care because of sub-optimally treated substance use disorders, psychiatric disorders, and other health disparities, incarceration could enable individuals to access HIV testing, ART, and general health care. These benefits, however, require that prisons have health infrastructures that can deliver comprehensive HIV services; including ART.”

One of the main challenges in the provision of this care is that many within these vulnerable populations come in and out of the corrections system on a frequent basis, which makes any type of consistent care almost impossible. “For people receiving ART in the community, arrest and detention often leads to an interruption of ART, which can be brief or long lasting depending on the availability of ART inside prison. Additionally, people detained in prisons might not acknowledge their HIV status, or might not take their medications in the presence of others because of a real or perceived stigma and discrimination, thus prolonging ART interruptions during detainment.” It is important to note that there are missed opportunities that may present themselves here. While HIV treatments require a large time commitment and a long period of treatment adherence for meaningful outcomes, HCV can be cured within a relatively short window of time. This should provide some traction with vulnerable populations as, with HCV treatment, once cured there would be no need for ongoing treatment. This is all the more reason why those individuals with HCV, who are incarcerated, should be screened and identified quickly so that treatment, if desired by the individual, can be started quickly.
Although HCV can be cured relatively quickly, there still needs to be provisions made for access to care during the remainder of their sentence, and post-incarceration. This an area in which a great deal of work needs to be done as discharge planning is often lacking, especially where those being released from a provincial facility are concerned. Without a suitable discharge plan around therapy, the continuation of treatment, etc., it is possible that an individual may revert to pre-incarceration behaviours that could lead to being reinfected with hepatitis C.46 Attention to issues such as job placement; treatment of drug use; mental illness triage and referral; other medical care; referral for assistance with housing, nutrition, entitlements and other services; transportation, and child care enhances the likelihood that medical discharge planning will be effective...Discharge planning and linkage to community aftercare also facilitates ongoing secondary prevention efforts...46

Having a discharge plan in place allows for a better chance of treatment adherence and, when it comes to HCV, curing the virus and potentially halting the epidemic, in conjunction with other harm reduction measures. “Studies of persons in federal custody have identified high rates of hepatitis C treatment adherence and completion in custody, high rates of treatment continuity after release with the support of a tailored program, and similar treatment effectiveness rates to those in the community.”37 However, even if a concrete discharge plan is put into place, it may still be hard to maintain, particularly for people who are from traditionally marginalized groups who face additional barriers to accessing resources that allow for post-incarceration stability. “The health benefits from provision of ART during incarceration are often lost following release from prisons, especially for women. Although high levels of viral suppression are achieved by many patients during incarceration, community re-entry is associated with loss of viral suppression. Many factors contribute to this loss of viral control after release, including relapse to substance use, unstable hours and unemployment, failure to access ART in the community because of loss of health entitlements, and reduced access to health care.”38

Continuity of Care

As noted previously, the bulk of past HCV treatment in Canadian Federal institutions utilized the older generation of hepatitis C drugs for which CSC had negotiated a discounted bulk price. Many contend that CSC has purposely reigned in the number of individuals treated by limiting treatment to those that were sickest first, as many public health plans also have, leaving decisions around treatment to appointed administrative staff, “Of those who require treatment, not all of them require treatment immediately, so there is a process in terms of individuals and the decision by their physicians to treat them”.39

In 2016, some experts contended that if CSC were to implement national treatment guidelines, the number of eligible prisoners could be as high as 2000.40 An example of how treatment guidelines could look would be the new guidelines published last year by the Canadian Association for the Study of the Liver (CASL) which recommended that, “All patients with chronic [hepatitis C virus] infection should be considered candidates for antiviral therapy...these guidelines were subsequently endorsed by the federal Canadian Agency for Drugs and Technologies in Health.”41 In the past, CSC has budgeted around a set number of individuals treated per year. As recently as last year, CSC has had an ambitious “Cost Containment Plan” in place. This plan was centered on treating only 240 prisoners per year. This hard cap was much more restrictive than the approach taken by public drug programs in the community, under which everyone who meets certain health-based eligibility criteria for hepatitis C drugs can access them.42 As will be discussed later, the directive that was recently undertaken within federal prisons, is much more reflective and in line with guidelines proposed by CASL and shift the focus of hepatitis C treatment from containing costs to maximizing the impact of treatment.

It is important to acknowledge that there are challenges to this type of treatment regime. CSC faces not just funding pressures, but also competing priorities within the prison system, where medical treatment is often not the priority of staff and administrators. A system that is focused on meting out punishment and the control of criminality, "corrections is a public safety or law enforcement activity rather than a public health activity” (Brewer, 1991).43

Budgetary Challenges associated with HCV in the prison context
“There is currently no Canadian prison that permits needle exchange programs, despite the fact that it has proven, through a great deal of research, to result in a reduction in the transmission of blood-borne diseases.”
Proponents of harm reduction methods emphasize that harm reduction isn’t about condoning illicit drug use, rather it is about promoting, “programmes and practices that aim to reduce the harms associated with the use of psychoactive drugs in people unable or unwilling to stop”. The issue of the place of harm reduction within Canada’s correctional system is not a new one. Many argue that CSC has an obligation to provide harm reduction measures to individuals within the system. Under sections 85 to 88 of the Corrections and Conditional Release Act (CCRA), “the Correctional Service of Canada is mandated to provide every prisoner with essential health care, and reasonable access to non-essential mental health care that will contribute to his or her rehabilitation and reintegration into the community.” Within the CCRA, the definition of healthcare states that it must, “conform to professionally accepted standards.” Prison-based needle and syringe programs have been supported by numerous agencies, including the World Health Organization, UNAIDS, UNODC, the Canadian Medical Association, the Canadian Public Health Association, the Canadian and Ontario Nurses Association and the Correctional Investigator of Canada, among others. Many argue that, “... since needle exchange is the accepted standard in the community for preventing the transmission of HIV and HCV via injection drug use, under the terms of the CCRA these programs must be made available to prisoners in the federal system.” However, there is currently no Canadian prison that permits needle syringe programs, despite the fact that it has proven, through a great deal of research, to result in a reduction in the transmission of blood-borne diseases.

As mentioned previously, needle-sharing, within the prison setting, is readily apparent and occurs for a number of reasons, “The scarcity of syringes results in patterns of sharing amongst large numbers of persons...Ownership of injecting equipment can confer privileged position inside prison. It enables owners to levy a charge to others for the use of injecting equipment or trade drugs for the loan of injecting equipment. Some prisoners in the studies suggested that a prisoner may not disclose the fact that they are HIV positive, for fear that they would not be able to gain access to a syringe in future.” Much like drugs, syringes are proven commodities within the prison environment. This trend doesn’t have the promise of reversing itself anytime soon. Historically, Canadian prisons have been a “zero tolerance” space when it comes to drug use, “Increased penalties for drug use, tightened security measures to reduce the supply of drugs, and heightened surveillance of individual drug users are often put forward as “law and order” solutions to public health problems,” thus turning a blind eye to, and exacerbating, the problem. This “law and order” solution also encourages people who use injection drugs in prison to undertake these acts more covertly, as opposed to a “harm reduction” model where drug use is acknowledged and not penalized, thus allowing for guidance on how to use injection drugs safely and responsibly, “Many prison systems, particularly those in the developed world, routinely and/or randomly test prisoners for illicit drugs, most often by urinalysis. Prisoners who are found to have consumed illicit drugs can face penalties under criminal laws or administrative/institutional penalties, which can result in loss of privileges or an increase in the amount of time a prisoner will be incarcerated. Therefore, there is a great incentive for prisoners who use illicit drugs to avoid detection.”

Prison systems also seem concerned with safety in the face of including Needle Syringe Programs (NSPs) in prison. Proponents of NSPs point to the fact that the first recorded needle-sharing program was started in Switzerland in 1992. Since that time, “there have been no reports of syringes ever having been used as weapons in any prison with an operating NSP. The only report of a syringe ever being used as a weapon is from a prison in New South Wales, Australia, which did not have a NSP.” After the introduction of the first NSP, harm reduction via needle exchange programs began to gain more traction worldwide. The CSC had even proposed early on that NSPs be piloted in Canadian prisons, “In November 1999, CSC’s internal Study Group on Needle Exchange Programs issued a report recommending that the federal prison system pilot test five needle exchange projects, one in each region of Canada (including one women’s institution). However, the recommendations of that report were never implemented...” Lack of movement to introduce NSPs in Canada have been an ongoing issue, despite an ever-growing body of literature supporting and recommending their introduction, “In 2006, the Public Health Agency of Canada (PHAC), at the request of CSC, studied the potential risks and benefits of prison NSPs and concluded that, in prisons where NSPs are in place, they do not lead to injection drug use, that needle-sharing practices and health-care interventions related to injection-site abscesses, overdoses and deaths decrease, and that referrals to drug-treatment programs increase. PHAC also concluded that NSPs do not compromise the safety and security of prison staff.” One of the few harm reduction methods more commonly used by CSC is the distribution of bleach for the purpose of disinfecting injection equipment. CSC uses this method of harm reduction, despite the fact that “[bleach] is not considered sufficient for the inactivation of HCV or HIV inside a used syringe, particularly in prison settings where injection drug use takes place under rushed and clandestine circumstances, leaving insufficient time to adhere to syringe-disinfecting protocols.” Many argue that the provision of bleach falls short of medically accepted “best practices”, particularly when compared to NSPs where unused, sterilized needles are distributed. This argument is furthered by the preponderance of support for needle exchange as a “best practice” outside of prisons and the shift away from recommending disinfection with bleach.
Numerous studies have shown that the use of bleach to disinfect injection equipment has a negligible impact on HCV transmission, and fairs particularly poorly when compared to the efficacy of NSPs:

“...two studies assessed the effect of bleach on hepatitis C virus (HCV) prevalence and neither found a significant effect of bleach on HCV seroconversion (Kapadia et al., 2002; Hagen et al., 2001).”

“A review of the effectiveness of bleach in the prevention of HCV infection concluded that, "although partial effectiveness cannot be excluded, the published data clearly indicates that bleach disinfection has limited benefit in preventing HCV transmission among injection drug users".”

In addition to being an inferior option for eliminating traces of blood-borne viruses, bleach is also not likely to be used properly to achieve decontamination. A committee assembled by CSC itself found that, “...because of the clandestine and furtive nature under which injection drug users operate in prison settings; of the primitive and makeshift equipment used to inject drugs; and, of the tendency of injection drug users to become less careful when their cravings overcome their judgement, there is no guarantee that the use of bleach alone will effectively reduce transmission of infection from HIV or hepatitis C” (Correctional Service of Canada, 1999).

HCV transmission can also occur through the use of tattooing needles. There is much data to suggest that needle-sharing and tattooing are key determinants of HCV infection in prisons. As a way to combat this, in 2004 CSC announced that they would be running a pilot program around safer tattooing practices, which would include safe areas put aside for tattooing services, as well as education around safe practices. In 2005, “Prisoner tattooists were hired after successfully meeting the established criteria and completing the safer tattooing training. Correctional staff supervised the tattoo shops...Originally, the plan was to evaluate the results of the pilot program before a decision would be made regarding implementation in federal prisons across Canada. However, in 2006, after a change in government, the new minister responsible for prisons decided to terminate the initiative...”

“Although women constitute a small proportion of the incarcerated population in Canada, women are among the most marginalized people in prison, and suffer more from chronic diseases than men.”
Gender is also very important when talking about both prevalence rates and access to treatment and health care within prison facilities. Women are reported to have greater variability than men in the prevalence rate of hepatitis C. Studies in Canada, the United States, and Australia have shown that the prevalence of HCV among females ranges from 25.3% to 67.0%, as compared with 4.0% to 39.4% among men. It was postulated that the higher rate among females was the result of a higher concentration of females in prison for drug-related offences.64

Although women constitute a small proportion of the incarcerated population in Canada, women are among the most marginalized people in prison, and suffer more from chronic diseases than men. Aboriginal women represent more than 34% of the female population in prison, of which 80% have suffered from some form of physical and sexual abuse during their lifetimes. About 20% have also experienced mental health problems during their lifetimes. Only 50% of women have completed ninth grade versus 80% of the Canadian general public. Women in custody are isolated from their families and communities. They are also less likely to participate in community-based support programming. They receive less HIV/HCV services such as diagnosis, treatment and social services than men in prison or women outside prison. Women with HCV face many obstacles to accessing adequate health service in prison such as blood testing, accessing physicians or specialists, and pain management services.65

Social determinants of health play a large part in both who is serving time in prison and, more specifically, who has their most significant exposure to health care when they are, in fact, incarcerated, “in many countries, prisons and jails house low-income individuals with many syndemic comorbidities, many of whom do not have access to medical care and social services in the community.”59

Low socioeconomic status, low education level, low employment rates and low income status are much more common amongst the prison population in Canada. In 2009 and 2010, 20% of men in provincial custody in Toronto, were homeless at the time of admission; in British Columbia in 2012 and 2013 more than 50% of youth in custody had experienced periods of time without secure housing. Although recent data showed that 19% of Canadian adults have not completed high school, more than 50% of adults in custody, overall, have not obtained a high school diploma.60

Mental health and problematic substance use

Mental health issues and problematic substance use often go hand in hand as problems faced by a large percentage of individuals incarcerated within the Canadian prison system. According to the 2014-15 Annual Report of the Correctional Investigator, 80% of male prisoners deal with addiction or substance misuse and, “Two thirds of federal offenders were under the influence of an intoxicant when they committed their index offence.”61 This again emphasizes the need for harm reduction measures, even though the correctional system is so often focused on upholding the “law and order” agenda. Rather than ensuring the improvement of the health of incarcerated individuals, the focus of CSC’s response continues to favour punishing drug use. This continues to occur even if drug use is coming from a place of pain management, not drug addiction, “This suspicious and prohibitive environment leads to prisoners legitimate health issues being disregarded or insufficiently treated. Prisoners who are receiving prescription medications for pain can have their medication tapered and cut off if they are suspected of diverting or hoarding their medication. These conditions, in turn, can add to the likelihood that prisoners will resort to the underground drug market within the prison setting.”62

Mental health and problematic substance use has proven to link significantly with infection instead of injection drug use which, in turn, is linked with an increased risk of acquiring HCV within the prison environment, “A 2010 survey by the Correctional Service of Canada (CSC) reported rates of HIV and HCV in federal prisons to be 15 and 39 times, respectively, the estimated prevalence in the Canadian population.”63
“Incarcerated patients with HCV have the option to be treated before their fibrosis level reaches F2 or higher, with the caveat that CSC have the capacity to provide treatment.”
The new directive states that incarcerated patients with HCV have the option to be treated before their fibrosis level reaches F2 or higher, with the caveat that CSC have the capacity to provide treatment. However, the potential is there that an incarcerated individual with HCV, in any federal institution, can access treatment while having a Fibrosis score of F0. The directive makes available the newest class of hepatitis C drugs, providing potential to access beyond what may be available in health care outside of federal prisons. Despite the potential financial cost associated with treating individuals with a fibrosis level of F0 and F1, this policy shift has huge potential to increase health outcomes. This will increase the number of individuals in treatment, and could enhance the overall levels of treatment for marginalized communities that have difficulty accessing medical treatment outside of a correctional facility. Given the links between prisoner’s health and broader public health, the directive should reduce the overall burden on the public health system. At the time of the finalization of this position paper, British Columbia and Ontario have announced that, due to a lower negotiated price on HCV drugs negotiated by the pan-Canadian Pharmaceutical Alliance (pCPA), their provinces will be reducing their restriction requirements to F0 as well within the coming year. The combination of expanded access in Federal prisons, which have the highest HCV rates in Canada, alongside the provinces with the most significant prevalence of HCV, could represent a major step towards eliminating hepatitis C in Canada.

The directive represents a marked shift for CSC, placing it at the forefront of expanded access to hepatitis C treatment in Canada. With it, CSC has pivoted away from a traditional “law and order” approach to their mandate, and taken a more substantial focus on providing much needed, proactive healthcare to a prison population comprised of people from many of Canada’s more marginalized communities. As mentioned previously, CSC has, historically, put a cap within their budget on the number of treatments being given for hepatitis C within any fiscal year. This directive ensures that Canadian federal inmates are receiving equal to or, in some cases, greater standards of care than the rest of the Canadian population.
Recommendations

Despite the positive potential of the new directive, there remain a slate of other issues that need to be addressed within the correctional system to adequately address the health of incarcerated people. There continues to be reticence on the part of the federal government to become more involved with the implementation of evidence-based harm reduction strategies within the federal prison context. The Government of Canada has recently withdrawn from a planned mediation around prison-based needle and syringe programs in federal institutions. This mediation was to take place in an attempt to resolve the lawsuit filed against the Government of Canada by Steven Simons. Simons, a former federal prisoner, the Canadian HIV/AIDS Legal Network, Prisoners with HIV/AIDS Support Action Network, CATIE, and Canadian Aboriginal AIDS Network launched a constitutional challenge over the federal government’s failure to protect the health of people in prison by refusing to implement needle and syringe programs to prevent the spread of HIV and HCV in federal institutions. Mr. Simons was infected with HCV from unsterilized injection equipment while incarcerated.

The lack of movement by the Federal government is disappointing particularly given the body of evidence that NSPs are effective in reducing rates of blood-borne diseases like HCV. The Government of Canada’s failure to act is all the more perplexing given that the Liberal Party acknowledged during the last federal election campaign that these programs are effective. Harm reduction programs should be implemented within federal corrections as a way to decrease the burden of HCV on the prison system. As noted previously, these programs represent a significant benefit to the public health system as a whole. There is still hope that change may be imminent as, “In 2016, some 250 Canadian organizations, representing the views of a broad cross-section of civil society, signed a statement urging federal and provincial governments to immediately implement needle and syringe programs in prisons across the country.”

Amid the unsubstantiated claims of potential institutional safety issues, there are also legislative and ideological concerns for CSC. An excellent example of this is the National Anti-Drug Strategy (NADS). “CSC’s adherence to the National Anti-Drug Strategy means that prisoners who test positive for drug use, or are suspected of being involved in drug use or the drug market, can face administrative consequences such as institutional charges, loss of visits, increased security classification, involuntary transfers, and loss of institutional employment. There can also be consequences for parole eligibility.” CSC’s adherence to NADS precludes them from meaningfully engaging in harm reduction and utilizing NSPs. CSC chooses to follow a “law and order” philosophy that involves the outright punishments of any and all drug use within prisons, as well as failing to acknowledge that intravenous drug use within the prison system leads to an increase in the prevalence of HCV.

However, there is hope that the federal government may move in a more positive direction. In December of 2016, the Minister of Health announced that NADS will be replaced with a new National Drug Strategy. The government has stated that, “The new strategy will replace the existing National Anti-Drug Strategy with a more balanced approach. It restores harm reduction as a core pillar of Canada’s drug policy, alongside prevention, treatment and enforcement and supports all pillars with a strong evidence base.” NSPs are often used in community-based settings with great effect. CSC is responsible for the safety and well-being of incarcerated individuals who are entitled to the same care that is available outside federal institutions. The refusal to administer NSP programs, which are widely held to be effective within the public health community, results in an increase of HCV prevalence within the prison environments. All prisoners should have access to sterile injection equipment in a confidential manner. Provision of injection equipment must also be provided alongside access to adequate information on safer use practices and access to treatment resources to allow individuals to make informed choices around their treatment, or lack thereof.

These proposals align with public health evidence and are supported by an increased call from many parts of the healthcare sector to implement harm-reduction strategies across the correctional system. The Office of the Correctional Investigator has also been calling for this over the course of a number of years stating, “Access to these measures in prison is both a public health and human rights issue. .. With proper controls in place, needle exchange and safe tattooing programs in prison do not jeopardize the safety and security of staff, inmates or the institution. CSC has already demonstrated that safe tattooing sites can be effectively implemented in federal corrections to the benefit and interests of the health and safety of staff, inmates and the general public alike.” It is, therefore, recommended that CSC go back and revisit the measures that they began to implement almost 20 years ago. Taking the leap to implementing a wide-scale NSP network across all federal institutions, as well as the re-introduction of the programming around safe tattooing practices, would be an excellent start to implementing wide-spread harm reduction strategies within the system.
In order to do that, however, capacity issues within the prison system need to be addressed. Increased capacity is of utmost importance and underpins all of these recommendations, as well as the new federal directive. This is a problem cutting across all of corrections. Any comprehensive programming within the prison environment, in areas such as harm reduction strategies, is reliant on proper staffing. Capacity has been an ongoing issue within CSC and requires immediate attention if Canadian federal institutions are going to achieve their mandate. As it stands, issues have already been noted around staffing in areas like HIV/HCV screening and having the necessary staff in order to enable increased access, by the prison population, to treatment.

Also, despite the high prevalence rate of HCV within the prison population, having access to not just a member of staff, but a specialist in HCV is few and far between. HCV specialists are necessary in order to provide prisoners with tailored information around the meaning, progression and potential health complications of HCV. The lack of HCV specialists has a large impact on the ability to improve the health outcomes of the prison population. Also, knowledge around the hepatitis C virus itself can vary from institution to institution. Inadequate staffing, and staff lacking specialized knowledge, has a direct impact on treatment access that must be addressed, "Levels of satisfaction with existing services varied between institutions and often within institutions. The two most common concerns identified were accessing blood work and accessing physicians/specialists. This group was spread across five different institutions, which would indicate a broader systemic concern. The need to request blood work, rather than have it performed as a matter of routine, was a common theme mentioned by many women, as was the waiting time between taking the blood and receiving the results. In some cases, results were available in a week. In others it took three months or longer. In some cases, a lack of routine blood testing resulted in significant delays in accessing care."71

Linked with a lack of capacity to administer treatment and screening programs is the volatility of CSC health care policy, resulting in treatment staff that may not be aware of the newest policies and/or best practices. The Office of the Correctional Investigator noted this within its most recent annual report, "Health care policies across the board have been re-written, condensed, re-promulgated and implemented, but there has perhaps not been enough attention paid to how this constant state of flux and change has impacted scopes of practice, professional autonomy and patient advocacy on front-line service delivery."72 This lack of information around policies and procedures has the direct effect of impacting service delivery and continues to preclude access to care for a population that typically enters prisons with inadequate exposure to the healthcare system.

Effect of staffing capacity/knowledge on confidentiality

A lack of staffing capacity and knowledge around policies, or a lack of policies in place, can also lead to issues around confidentiality. Even if the CSC committed to implementing NSPs, and had the capacity to fully implement NSPs, there would be significant barriers around the confidentiality of prisoners accessing them, "Perhaps most significant is the degree to which confidentiality considerations influenced women’s decisions about whether to access or participate in HIV/HCV prevention and care programs... A related concern was that of identifying oneself as being involved in risk behaviours in the institution – such as sex or injection drug use – that discouraged women accessing prevention measures.73 For someone serving time in a federal institution, just the act of being seen accessing services around infectious diseases such as HCV, can make their lives problematic within the prison facility. There is a lot of stigma around diseases such as this. It can result in an individual not being willing to access, or participate in, treatment services, or programming, around HCV, "...The issue of confidentiality was integrally linked to satisfaction with services, and affected decisions about participation in or access to programs...it demonstrates the degree to which the issue of confidentiality must be addressed as a central element in the design and implementation of all HIV/HCV programs and services in prisons. It is an essential element of good practice...Specific areas where women highlighted concerns about confidentiality included the distribution of medications; the scheduling of HIV/HCV testing services (same day/time); the accessing of complementary or alternative therapies...and the accessing of safer sex measures and bleach from staff. Each of these activities had the potential for singling a woman out, and provoking questions from prisoners and staff about why she was accessing such services."74 It is therefore recommended that capacity-building activities take place that are focused on both increasing the staffing compliment, as well as promoting education around best practices/policies for new and pre-existing staff.
“The combination of expanded access in federal institutions, which have the highest HCV rates in Canada, alongside the provinces with the most significant prevalence of HCV, could represent a major step towards eliminating hepatitis C in Canada.”
Traditionally CSC, and public drug plans across Canada, have restricted access to HCV medications in order to limit costs while treating the sickest individuals first. However, due to recent price negotiations in the public drug plan arena, and the new directive from CSC, access to HCV treatment has now been enhanced to a certain extent. The combination of expanded access in federal institutions, which have the highest HCV rates in Canada, alongside the provinces with the most significant prevalence of HCV, could represent a major step towards eliminating hepatitis C in Canada while strengthening the health outcomes of vulnerable segments of the Canadian population.

However, this comes with the caveat that more work must be done within federal institutions, in areas like capacity-building and harm reduction. While the national HCV burden among Canadians is approximately 1%, the prevalence of HCV in Canadian correctional facilities is estimated to be between 20% and 40%, or twenty to forty times more than the national average. This high prevalence rate, amongst other healthcare issues also present within the prison environment, puts a heavy burden on the correctional system. Though the implementation of the recommendations within this paper may be costly, initially, they will put CSC much closer to being able to enhance the capacity of federal institutions to both prevent and treat HCV effectively.
References


5. Webster, Paul C., *Federal inmates treated for hep C drop 29%*. CMAJ, 2015; accessed online.


10. “Programs from Correctional Services Canada,” CATIE; accessed online.


   What Is Harm Reduction?” *Harm Reduction International*. International Harm Reduction Association; accessed online.


28 “Programs from Correctional Services Canada,” CATIE; accessed online.

29 Webster, Paul C., Federal inmates treated for hep C drop 29%. CMAJ, 2015; accessed online.


31 Webster, Paul C., Federal inmates treated for hep C drop 29%. CMAJ, 2015; accessed online.


39 Webster, Paul C., Many eligible federal inmates won't get new hepatitis treatment. CMAJ, Mar. 29, 2016; accessed online.

40 Webster, Paul C., Many eligible federal inmates won't get new hepatitis treatment. CMAJ, Mar. 29, 2016; accessed online.

41 Webster, Paul C., Prisons face hep C-treatment funding crisis. CMAJ, Jan. 18, 2016; accessed online.
Webster, Paul C., *Federal inmates treated for hep C drop 29%.* CMAJ, 2015; accessed online.


Van der Meuken, Emily., Claivaz-Loranger, Stephanie., Clarke, Seth., Ollner, Annika., Watson, T.M. “On Point: Recommendations for Prison-Based Needle and Syringe Programs in Canada”. (2016); accessed online.


Van der Meuken, Emily., Claivaz-Loranger, Stephanie., Clarke, Seth., Ollner, Annika., Watson, T.M. “On Point: Recommendations for Prison-Based Needle and Syringe Programs in Canada”. (2016); Accessed online.


