Hepatitis C virus (HCV) care in Canadian correctional facilities: Where are we and where do we need to be?

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  - Gilead Sciences
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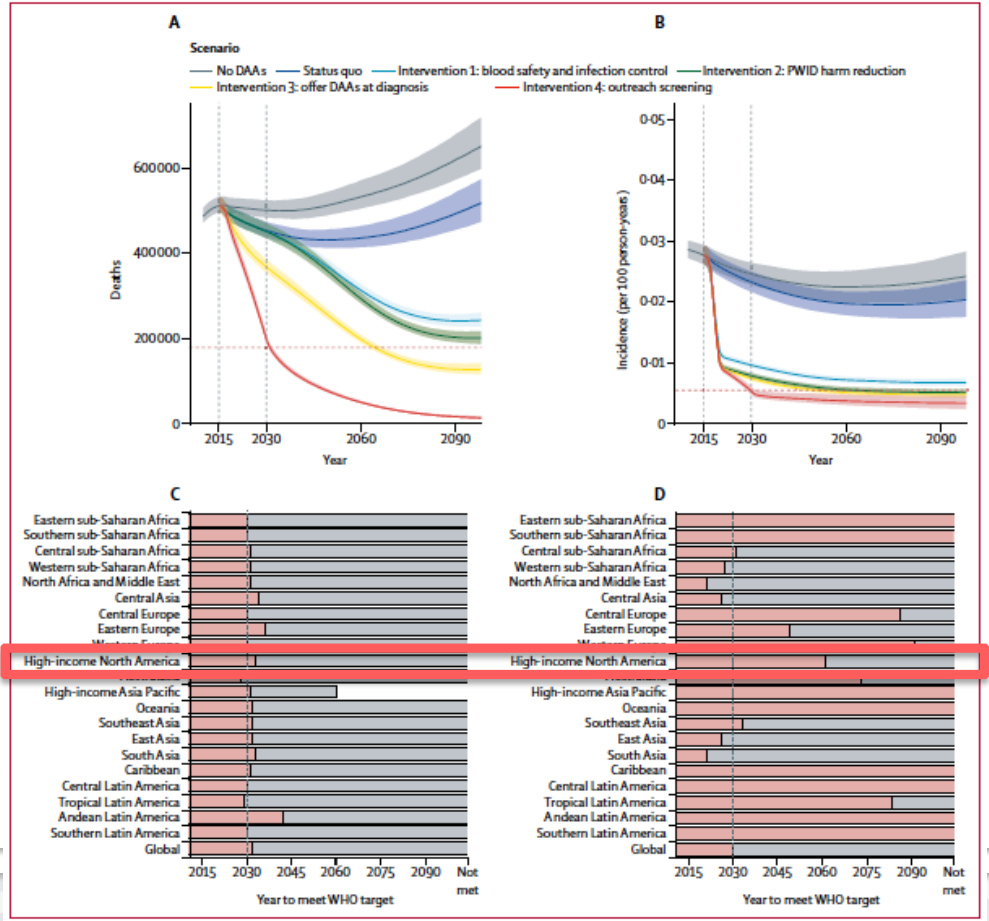
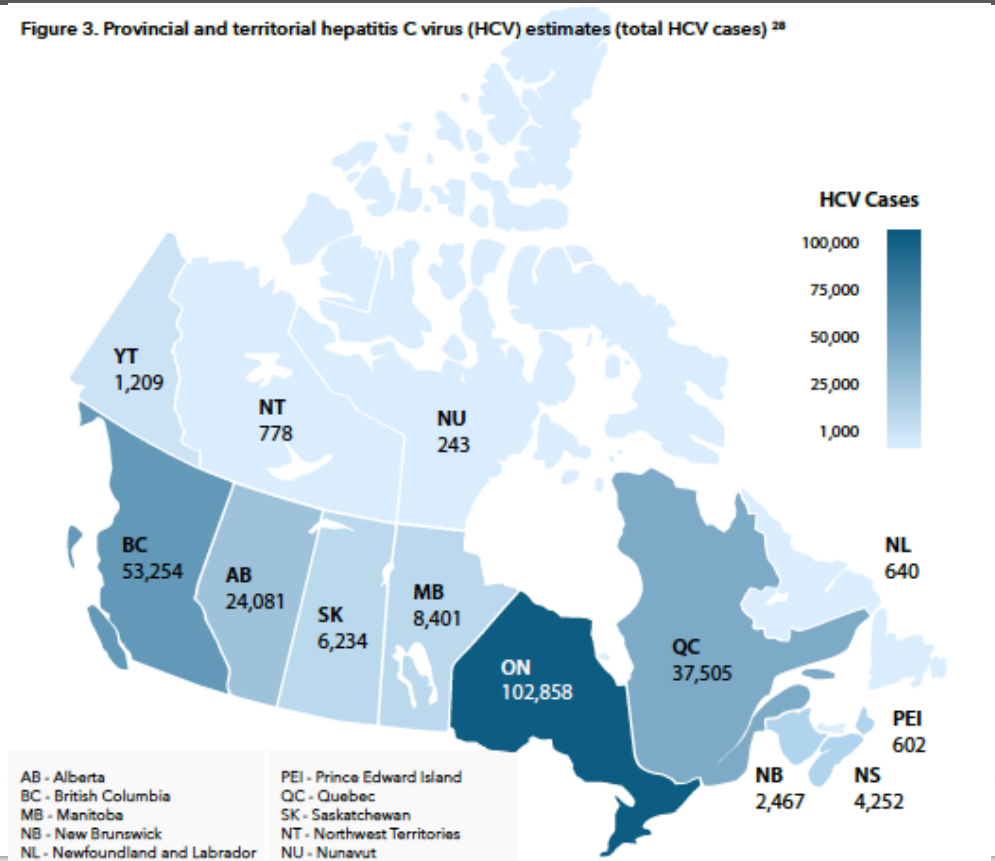
Canada NOT on track for HCV elimination



Heffernan A et al. Lancet 2019; 393: 1319–29.

Burden of HCV in Canada

Figure 3. Provincial and territorial hepatitis C virus (HCV) estimates (total HCV cases) [28]



- ~250,000 Canadians infected with chronic HCV[1]
  - 0.7% prevalence
- 40% are unaware of their infection[1]
- Blueprint released May 2019 by CanHepC with objectives and targets for 2025 and 2030

BLUEPRINT TO INFORM HEPATITIS C ELIMINATION EFFORTS IN CANADA

[1]The Canadian Network on Hepatitis C. Blueprint to inform hepatitis C elimination efforts in Canada. Montreal, QC. canhepc.ca/sites/default/ files/media/documents/blueprint_hcv_2019_05.pdf.

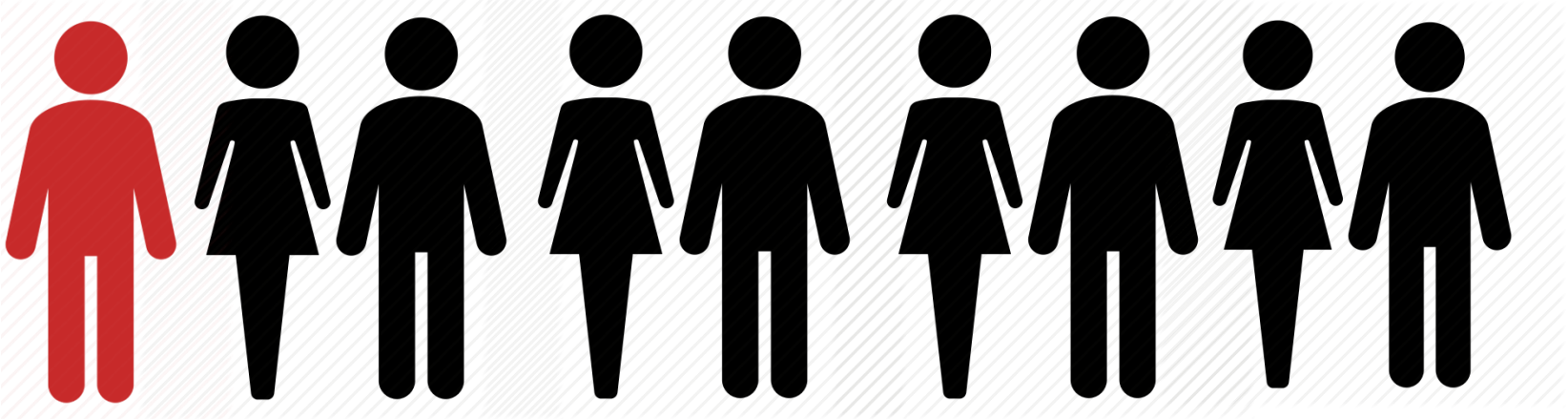
Canada's HCV priority populations

- HCV-antibody prevalence ~25%[1] in prisons
- HCV-antibody prevalence is **40-fold** higher than the Canadian general population
- ~20% of Canadian inmates reported a history of IDU prior to incarceration[2]

BLUEPRINT TO INFORM HEPATITIS C ELIMINATION EFFORTS IN CANADA

[1]The Canadian Network on Hepatitis C. Blueprint to inform hepatitis C elimination efforts in Canada. Montreal, QC. canhepc.ca/sites/default/ files/media/documents/blueprint_hcv_2019_05.pdf.
[2] Canadian Public Health Association (2004).

1 in 9 Canadians infected with HCV spends time in a correctional facility each year[1]



**** Unique opportunity to engage high-risk individuals in care ****

[1]Kouyoumdjian F et al. **Persons in correctional facilities in Canada: A key population for hepatitis C prevention and control.** Can J Public Health. 2015 Oct 3;106(6):e454-6.

Burden of HCV in Canadian Correctional Facilities

Federal

- 43 prisons[1]
- Sentences ≥ 2 years
- Annual admissions: 7,618[2]
- Daily counts: ~15,000[2]
  - ~2,700 inmates/day with chronic HCV[3]
- Care assumed by Correctional Service Canada (CSC)

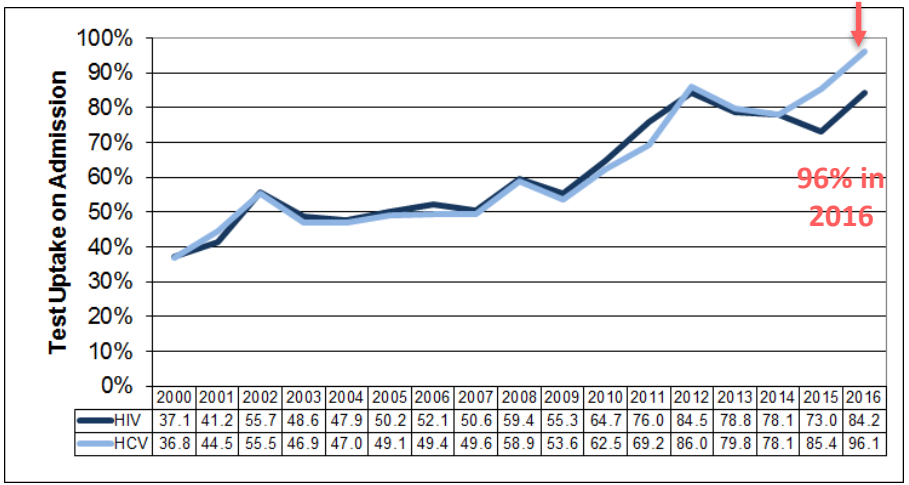
Provincial/Territorial

- 173 prisons[4]
- Sentences < 2 years
  - On remand (awaiting trial)
- Annual admissions: 201,189[2]
- Daily counts: ~25,000[2]
  - ~4,380 inmates/day with chronic HCV[5]
- Care not uniformly assumed by Ministry of Health (MOH)

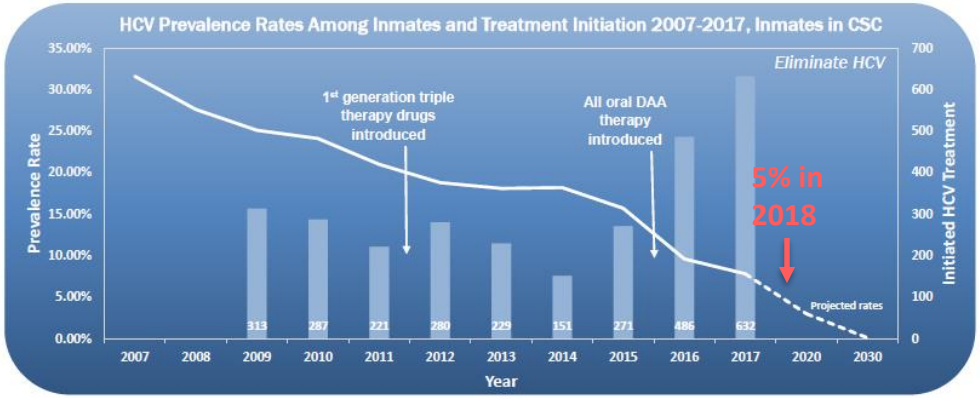
[1]Correctional Service Canada. http://www.csc-scc.gc.ca/facilities-and-security/index-eng.shtml. [2]Reitano J. Adult correctional statistics in Canada, 2015/2016. http://www.statcan.gc.ca/pub/85-002-x/2017001/article/14700-eng.pdf. [3]Webster P. Dramatic budget increase for hepatitis treatment in federal prisons. CMAJ. 2017;189(32):E1052. [4]World Prison Brief. http://www.prisonstudies.org/country/canada/. [5]Kronfli N, Cox J. Care for people with hepatitis C in provincial and territorial prisons. CMAJ. 2018;190(4):E93–4.

HCV care in Federal Corrections

- Opt-out STBBI screening within 24 hours of admission (HIV, HCV, syphilis, gono/chlam) and risk-based during incarceration
- May 2017: Open access to DAAs for all inmates
  - ~600 inmates treated in 2018 with SVR ~100%
- Policies and programs in place to support prevention (harm reduction measures including OAT, prison-based needle and syringe exchange programs, etc.)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
HIV	37.1	41.2	55.7	48.6	47.9	50.2	52.1	50.6	59.4	55.3	64.7	76.0	84.5	78.8	78.1	73.0	84.2
HCV	36.8	44.5	55.5	46.9	47.0	49.1	49.4	49.6	58.9	53.6	62.5	69.2	86.0	79.8	78.1	85.4	96.1

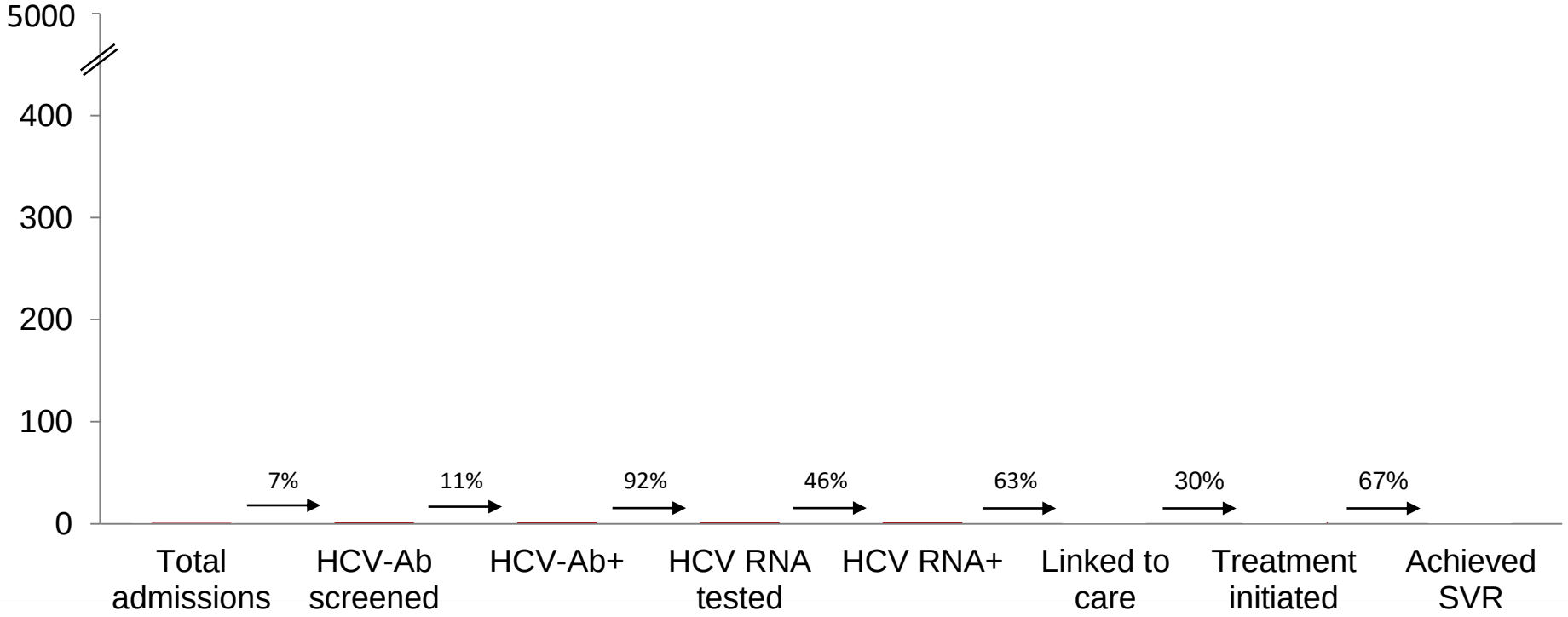


Graphs courtesy of Harold Boudreau, Director, Health Services Sector, CSC

HCV Screening in Provincial/Territorial Corrections

- Screening provided upon request (“on demand”) in all prisons except British Columbia
  - On demand <<< Risk-based << Opt-in < Opt-out
- Venipuncture for HCV antibodies is standard screening test
- Reflex HCV RNA/genotype is NOT standard of care, therefore multiple visits are required
- TATs for Ab and RNA vary dramatically depending on geographic location of facility and processing laboratory

Bordeaux provincial prison, Montreal, Quebec (July 2017- June 2018)



N Kronfli et al. Under review, CMAJ Open

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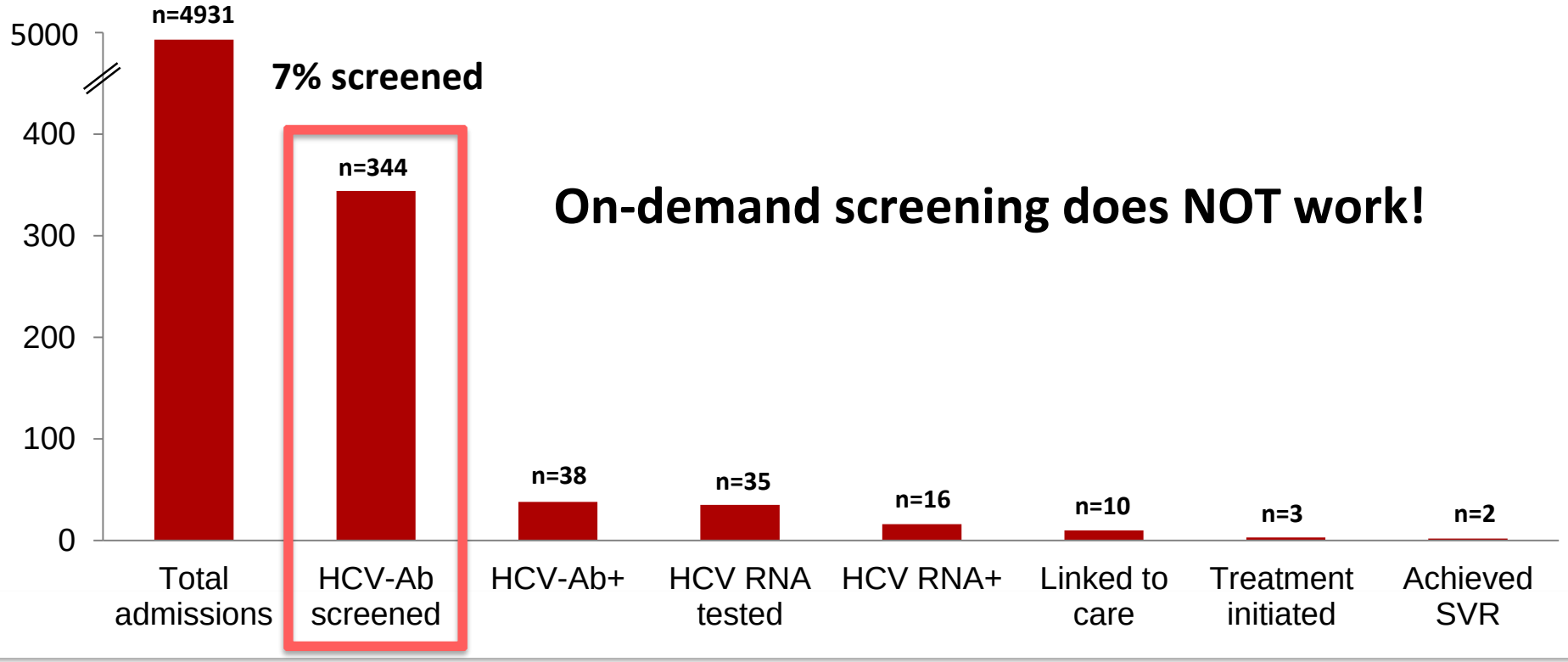


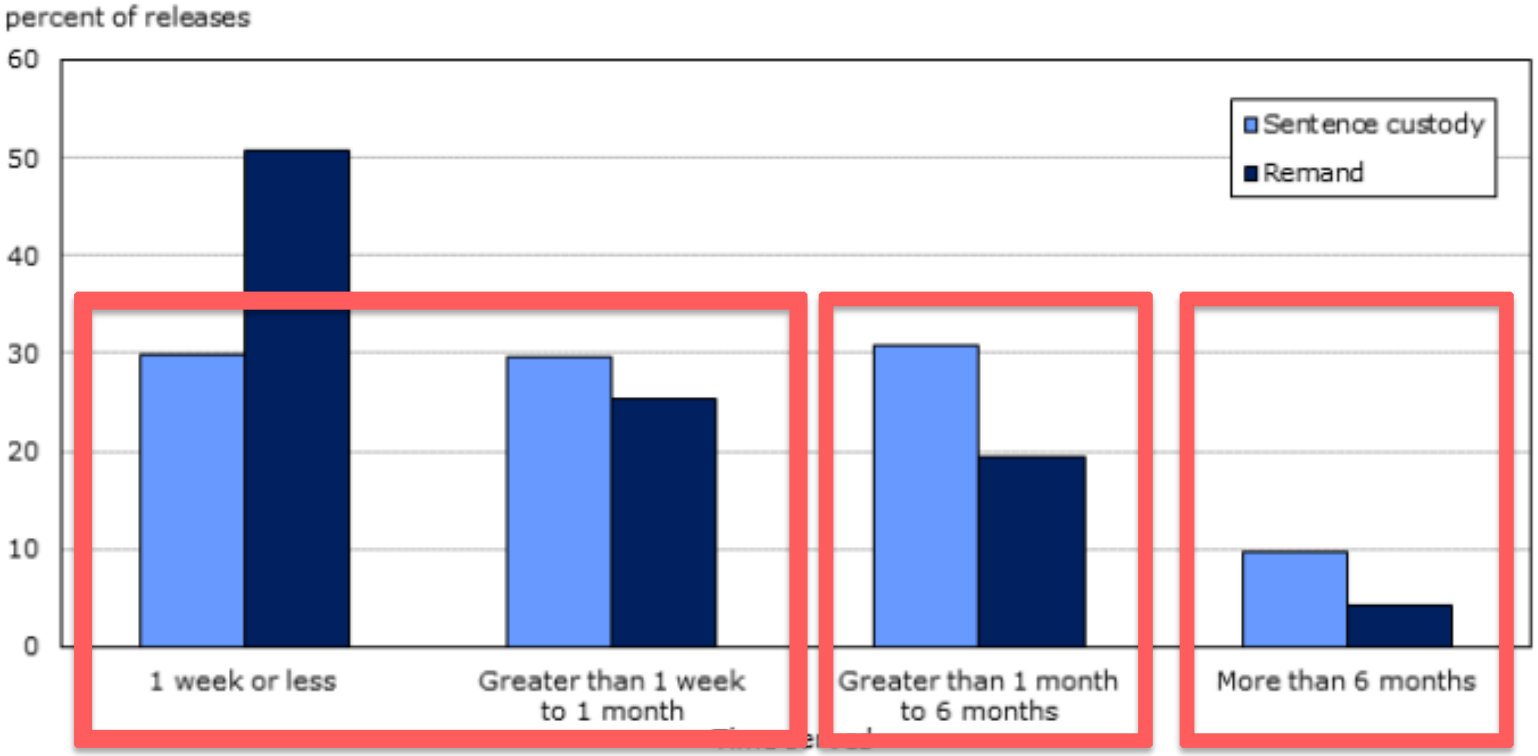
HCV Treatment in Provincial/Territorial Corrections

- Policy and programmatic support for treatment initiation and access varies across jurisdictions
  - Provision of health care in P/T prisons not always under MOH
- Funding for DAAs: Corrections budgets >> Provincial health budgets
- Short median sentences → high turnover rates
  - 30% ≤ 1 week
  - 60% ≤ 1 month
- Inter-prison transfers common
  - Protocols do not exist to ensure continuity of care between prisons
- Unexpected prison releases common
- Re-incarceration not uncommon
  - ~40% HIV-HCV co-infected incarcerated Canadians experienced re-incarceration at least once[1]
- No policies in place for treatment of “remand” population

[1]Kronfli N et al. Journal of the International AIDS Society 2018, 21:e25197

HCV Treatment in Provincial/Territorial Corrections

Percentage of releases from adult provincial/territorial custody, by time served, 2015/2016



Note: Excludes Alberta due to the unavailability of data.
Source: Statistics Canada, Canadian Centre for Justice Statistics, Adult Correctional Services Survey 2015/2016.

Linkage to HCV care following release

- Currently, little research focused on improving linkage to HCV care following release
  - Quebec: Effectiveness of a multidisciplinary care model (RN, SW, PN) on linkage to care is underway (PI: N. Kronfli)
- Qualitative research regarding the barriers and facilitators to linkage to HCV care among released inmates lacking, but likely driven by social determinants of health
  - N Kronfli et al. JVH, under review.
- Strategies to ensure ongoing follow-up of individuals experiencing re-incarceration to be further explored
- Collaborations with community organizations should be strengthened

Harm Reduction in Federal Corrections

- June 2018: CSC implemented a prison-based needle and syringe exchange program (PNSP) in 2 correctional facilities in a phased-in approach to strengthen prevention efforts:
  - Grand Valley Institution for Women (Ontario)
  - Atlantic Institution (New Brunswick)
- April 2019: PNSPs expanded to 4 additional sites (6/43):
  - Fraser Valley Institution for Women (British Columbia)
  - Edmonton Institution for Women (Alberta)
  - Nova Institution for Women (New Brunswick)
  - Joliette Institution (Quebec)
- Pushback from CSC officers regarding the safety of PNSPs
  - No increase in drug consumption or injection
- July 2019: CSC rolled out an overdose prevention site (OPS) in Alberta's Drumheller Institution, whereby inmates visit the health care facility to use their drugs under supervision

Alternative Harm Reduction Measures

- Bleach
  - Offered in federal and provincial/territorial prisons
  - Offers little benefit to prevent HCV transmission among PWID (PHAC, 2004)[1]
- Opioid agonist treatment (OAT)
  - Methadone maintenance treatment (MMT) programs in federal prisons (2001-2008)
    - Changed to opioid substitution therapy (OST) in 2008 to include suboxone treatment
  - Variable access to OAT in provincial/territorial prisons
    - Currently, OAT is provided to all individuals admitted to provincial prisons on methadone
- "Safer Tattooing Initiative" in 6 federal prisons (2005-2007)
  - Terminated despite evidence of enhancing inmates and staff knowledge and awareness on blood-borne infections

[1]Public Health Agency of Canada. The effectiveness of bleach in the prevention of hepatitis C transmission. Final Report. Ottawa; 2004. http:// publications.gc.ca/collections/Collection/ H39-4-37-2004E.pdf

Provincial HCV Elimination Efforts: Quebec

- Screening
  - Opt-in in 2/16 provincial prisons
  - Risk-based in 4/16 provincial prisons
- Health services shift from Ministry of Public Security to Ministry of Health and Social Services
- ECHO telemontoring model available in provincial prison(s) to link with HCV specialists
- MOH nurses dedicated to screening and care of STBBIs
- Coordination with prison administration and external HCV specialists to ensure linkage to care based on release dates
- HCV care in Provincial Prison Working Group
  - To describe current clinical practices and barriers to HCV care across Quebec's 16 provincial prisons
  - Improve care for provincial inmates with chronic HCV

Provincial HCV Elimination Efforts: Saskatchewan

- Education of corrections team re. screening at intake and referrals when HCV Ab+
- Coordination with prison administration to plan treatment starts based on upcoming court or release dates
- Task shifting to allow RNs and NPs to prescribe DAAs under MD supervision
- Coordination with MOH Drug Plan to allow same day/next day approval for DAAs
- Increased RN presence and coordination across provincial prisons (RPCC, SCC, PACC and White Spruce) to facilitate ongoing HCV care during inter-prison transfers

See Poster 238

Provincial HCV Elimination Efforts: British Columbia

- Screening
  - STBBI testing offered at intake in 9/10 provincial prisons; however, it is not mandatory to offer screening
  - Opt-out STBBI screening at reception is being piloted in 1 provincial prison (with reflex HCV RNA and genotype)
- Universal access to DAAs through PharmaCare
- Scale-up of OAT (~35%)
- Community Transition Teams (= peer + SW)
- BC Provincial Corrections are currently developing a province-wide HCV treatment program

Community collaboration

- Involvement in provincial/territorial prisons is minimal
- Key advocacy role
- Barriers to involvement:
  - Access to inmates due to heterogeneity of provincial prison oversight
  - Buy-in from prison/health care stakeholders
  - Lack of interest and knowledge from correctional staff
  - Research ethics approval

- How can community collaboration be optimized?
  - Financial support and involvement from ministries responsible for provincial care
  - On-site stakeholder support
  - On-site access for education, social support, enhanced linkage to care post-release

- Community inform research design, deployment and knowledge translation

- Research can assist community in gaining access to and support from prisons

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CAPAHC
Le centre d'aide aux personnes atteintes de l'hépatite C

PASAN

What should our focus be?

- Opt-out screening
  - “Normalizing” HCV screening reduces stigma and increases acceptance
  - **Culture- and gender-appropriate peer support programs**
    - Peers undergo STBBI training and offer screening in conjunction with correctional health care staff

Where do we ultimately need to be?

- Create a specific focus for people with experience in the prison system in all provincial and territorial HCV strategies;
- Increase funding for ministries responsible for provincial and territorial correctional services;
- Implement harm reduction programs and policies, in consultation with prisoners, correctional health staff and others;
- Provide HCV treatment for all prisoners and/or linkage to care upon release for those with short sentences, irrespective of eligibility for provincial drug benefit programs;
- Provide rapid linkage to harm reduction, social and HCV care services upon release; and
- Include prison environments in HCV research.

PEOPLE WITH EXPERIENCE IN THE PRISON SYSTEM (PROVINCIAL AND FEDERAL)

HCV is far more common among people within Canadian prisons than people outside of them. In federal facilities, 30% of prisoners have evidence of a past or current HCV infection. In provincial facilities, 15% of men and 30% of women have evidence of a past or current HCV infection.[46] HCV-related policies and practices vary between provincial, territorial and federal jurisdictions; this affects access to HCV education, testing and treatment.

PWID/PWUD, Indigenous peoples, and other populations are more likely to have experience in prison systems. People who enter the prison system already have a higher risk of HCV, and their time in prison further increases this risk, since injecting drugs and tattooing with shared equipment in prison are common, and poor access to safe tattooing, piercing and injection equipment forces many individuals to re-use unsterilized equipment. At the same time, inadequate or no access to opioid agonist therapy, lack of support for management of drug withdrawal and sharing razors and nail clippers facilitate the spread of HCV in prison.

Even in jurisdictions with policies that stipulate the availability of HCV treatment for prisoners, regardless of liver fibrosis stage or drug use history, in practice, access to HCV treatment may be difficult in a prison setting. There are many reasons for this, including lack of confidentiality in prison settings; release and difficulty being referred to HCV specialists or HCV-knowledgeable providers. Short periods of incarceration in provincial prisons pose an additional set of challenges for diagnosis of HCV and engagement into care and treatment.

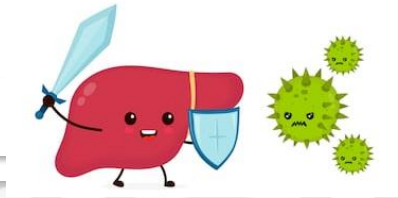
Policy and service delivery recommendations:

- Create a specific focus for people with experience in the prison system in national and all provincial and territorial HCV strategies;
- Increase funding for ministries responsible for provincial and territorial correctional services to ensure that all prisoners living with HCV receive education and are offered testing, treatment and support, irrespective of liver fibrosis stage and/or drug use history, as is currently done in the federal prison system;
- Implement harm-reduction programs and policies, in consultation with prisoners, correctional health staff and others that include:
  - Needle syringe programs (NSP) and opioid agonist therapy (OAT) - provide NSP, OAT and the full suite of harm-reduction services, and ensure that these services are accessible, confidentially available, and consistent with good practice in public health;
  - Provide programs for safe tattooing as well as measures to address transmission from tattooing equipment, razors and nail clippers;
- Develop, institute and evaluate policies and procedures to improve access to HCV prevention, testing and treatment:
  - Routinely offer voluntary, confidential HCV testing, education and counseling to prisoners at prison entry and during prison stay, facilitated, where possible, by community-based organizations;
  - Provide HCV education for prisoners and prison workers to reduce stigma;
  - Provide population-specific HCV prevention

BLUEPRINT TO INFORM HEPATITIS C ELIMINATION EFFORTS IN CANADA

Conclusions/Implications

- HCV elimination in Canadian corrections will unlikely occur by 2030
- There are major differences in the provision of HCV care in federal vs. provincial/territorial prisons
- An evidence-based approach to HCV micro-elimination would entail:
    1. Adopting systematic “opt-out” screening;
    2. Universal access to DAAs and improved linkage to care programs; and
    3. Expansion of PNSPs, OAT and other harm reduction measures.
- Engaging researchers, clinicians and other health care providers, policy makers, correctional officials, and members of the community in dialogue



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