Increased hepatitis C screening and diagnosis after transfer of health care responsibility to public health system in British Columbia Correctional Centres

Bartlett S^{1,2}, Yu A, ¹ Pearce M^{1,2}, Binka M¹, Wong S, ^{1,2} Wong J^{1,2}, Alvarez M¹, Jassem A^{1,2}, Young S¹, Pick N^{2,3}, Martin RE², Erickson M², Krusi A², Korchinski M⁴, Young P⁴, Fong M⁵, Desrosiers N⁵, Krajden M^{1,2}, Buxton J^{1,2}, Janjua N^{1,2}

Background:

Increased hepatitis C virus (HCV) screening among people who are incarcerated (PWAI) is key for elimination efforts to be successful. This study aims to evaluate the impact on HCV screening and diagnosis in all 10 British Columbia (BC) Provincial Correctional Centres (PCCs), after responsibility for health services was transferred from BC Corrections to Provincial Health Services Authority (PHSA) in October 2017.

Methods:

Data from BC Centre for Disease Control Public Health Laboratory (BCCDC PHL), which performs >95% of all anti-HCV and >99% of all HCV RNA and genotype tests in BC, were used for this study. The number of anti-HCV, HCV RNA and HCV genotype tests that were ordered from BC PCCs between January 1 2010 and December 31 2019 was determined. The number of new HCV diagnosis while incarcerated was defined as the number of first-time anti-HCV-positive test results from the BCCDC PHL among clients residing in BC PCCs.

Results:

Compared to 2017, HCV antibody, RNA, and genotype tests ordered from BC PCCs in 2019 increased by 215% (n=1383), 322% (n=674) and 377% (n=186), respectively (Figure 1). In 2019, 5.7% (79/1383) of anti-HCV tested PWAI received a new HCV diagnosis, with the number of new HCV diagnoses increasing by 140% compared to 2017. In 2017, an estimated 3.5% (639/18,315) of people entering BC PCCs received an HCV test, which increased to 15.3% (2243/14,703) in 2019.

Conclusion:

The transfer of health services in BC PCCs to PHSA led to increased volume of HCV screening, with concomitant increases in new HCV diagnoses among PWAI in BC. Future work will evaluate if these changes also resulted in improved linkage to care for HCV within BC PCCs. Additional efforts should be taken in BC PCCs to increase HCV screening to maximise potential impact on identification of PWAI with undiagnosed HCV infection.

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¹British Columbia Centre for Disease Control, Vancouver, Canada

²University of British Columbia, Vancouver, Canada

³Oak Tree Clinic, BC Women's Hospital, Vancouver, Canada

⁴Unlocking the Gates Services Society, Maple Ridge, Canada

⁵British Columbia Mental Health and Substance Use Services, Vancouver, Canada

Figure 1. Percentage of HCV tests (HCV antibody [Anti-HCV], HCV RNA and HCV genotype combined) among the total number of intakes to all 10 BC Provincial Correctional Centres^{\$\$} each year[#] (purple bars, right axis), and annual number of Anti-HCV, HCV RNA and HCV genotype tests (coloured lines, left axis), ordered from all 10 BC Provincial Correctional Centres from January 1st 2010 to December 31st 2019. \$Number of intakes not available for 2010-2011. *Number of intakes per fiscal year, not calendar year.

