HARM REDUCTION IS HEALTHCARE: EXAMINING STBBI KNOWLEDGE, TESTING BEHAVIOURS AND UPTAKE OF DRIED-BLOOD-SPOT TESTING AMONGST A COHORT OF PEOPLE ACCESSING A SUPERVISED-CONSUMPTION-SITE IN VANCOUVER, CANADA

Hannigan A[1], Krishnan N[1], Vickers D[1], Bytelaar S[1], Ding E[1], Harris M[1,2], Bartlett S[3], Schmitz D[4], Thumath M[2], Montaner JSG [1,2], Hull M[1], Guillemi S[1,2], Salters K[1,2]

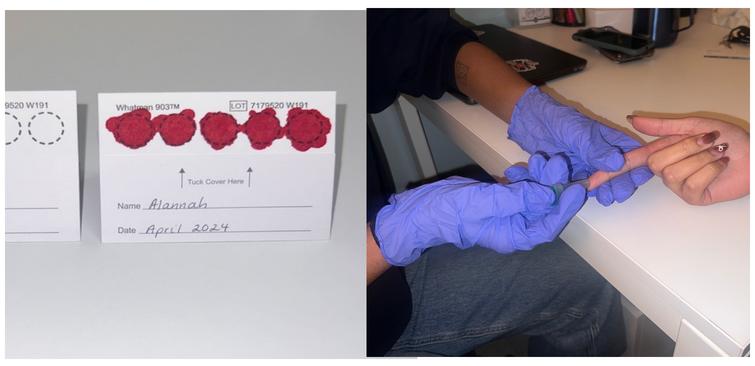
[1]British Columbia Centre for Excellence, Vancouver BC; [2]University of British Columbia, Vancouver BC; [3]British Columbia Centre for Disease Control, Vancouver BC; [4]BC Hepatitis Network, Vancouver BC

Background

People who use drugs (PWUD) are particularly vulnerable to sexually transmitted and blood-borne infections (STBBIs). In British Columbia (BC), Canada, upwards of 16,000 people are living with chronic HCV, with the largest proportion of new infections occurring among people who inject drugs. Furthermore, infectious syphilis continues to pose a significant public health risk with cases across Canada almost doubling from 6,371 cases in 2018 to 12,135 in 2023. This study aims to characterize uptake of a low-barrier STTBI (dried-blood-spot or DBS) testing strategy among a cohort of PWUD in Vancouver, Canada that engage in harm reduction services.

Dried-blood-spot (DBS) testing

DBS testing is a simplified, reliable method for diagnosing STBBIs like HCV and HIV, offering accuracy comparable to standard blood tests. It uses a finger-prick sample on filter paper, requires no specialized storage or transport, and does not have to be administered by a healthcare professional. By enabling one-visit, low-barrier testing without intravenous blood draws, DBS reduces loss to follow-up and can improve access to treatment.



SCAN ME!

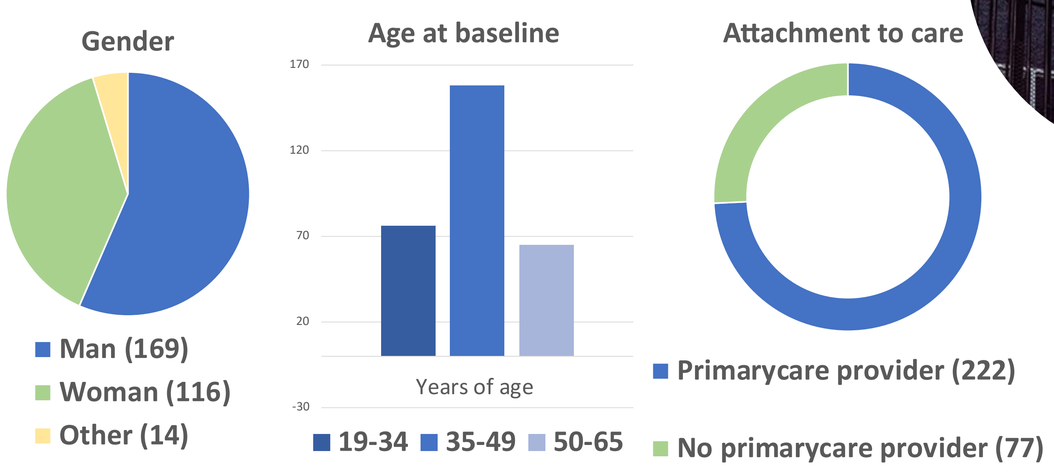
Methods

Study design: The Health Connect (HC) study launched in January 2024 and was designed to evaluate the impact of STBBI DBS testing at a Vancouver supervised-consumption-site (SCS). We utilized a longitudinal survey study design to evaluate the impact of the DBS intervention among participants.

Data collection: Participating SCS clients (ages 19+) completed interviewer-administered surveys at baseline, 1-month and 12-months. Survey data included participant socio-demographics, testing behaviours, and assesses the uptake of DBS testing among participants.

Analysis: Logistical regression analysis examined the probability of engagement in DBS testing among HC participants. We removed participants with no response(s), leaving 278 participants, 93% of the overall HC cohort. Fishers exact test was used to provide p-values for a bivariate analysis of DBS engagement of participants currently *with* and currently *without* a primary healthcare provider (at time of baseline).

Sample (N=299)



Results (N=299)

- 258(86%) participants elected to participate in DBS testing (HCV, HIV and syphilis)
  - 130(50%) of whom had not received any form of STBBI testing in the past 12-months
  - Among the 41 participants who declined to participate in DBS testing, 23(56%) reported having completed STBBI testing in the past 12-months
- 163(55%) participants reported regular engagement (≥50% of the time) in SCS services when using drugs
- 246(82%) participants reported visiting a doctor in the past 12-months
- STBBI knowledge among the cohort was high [median score on STBBI survey of 7/8]

Dried-blood-spot STBBI results (N=258)	
HCV positive	39(15%)
HIV positive	15(6%)
Syphilis (Ab) positive	60(23%)

Probability of DBS engagement in HC (N=278)

Variable	Unadjusted Odds Ratio (OR) (95%CI)	Adjusted Odds Ratio (OR) (95%CI)
Age		
<30	Ref	Ref
30-45	2.57(0.91,7.28)	2.34(0.78,7.05)
>45	3.52(1.07,11.54)	3.63(1.02,12.84)
Gender		
Woman	Ref	Ref
Man	0.88(0.43,1.8)	1.07(0.5,2.29)
Other/Non-binary	1.43(0.17,11.76)	1.79(0.6,2.66)
Perceived housing stability		
Very/somewhat satisfied	Ref	Ref
Neutral	0.91(0.17,4.86)	0.9(0.15,5.24)
Somewhat/very unsatisfied	0.84(0.34,2.03)	0.72(0.28,1.85)
Currently have a healthcare provider		
Yes	Ref	Ref
No	1.49(0.62,3.57)	1.75(0.7,4.38)
Sexually active (past 3 months)		
Yes	Ref	Ref
No	1.35(0.67,2.75)	1.26(0.6,2.66)
Taken HIV PreP		
Yes	Ref	Ref
No	3.88(0.94,16.01)	4.7(1.01,21.95)
Never heard of PreP	2.34(0.69,7.89)	2.28(0.58,8.91)

Key takeaways

- The study effectively engaged a population at high risk of STBBIs. It was successful in identifying individuals who had active infections. Whether or not these were known or new infections will be part of study follow-up and analyses. The greatest challenge presented remains in reducing loss to follow-up and facilitating meaningful connection to care.
- Health Connect testing uptake suggests DBS should be routinely offered at harm reduction sites to improve linkage to STBBI care and treatment for clients disengaged from care and testing.
- Findings will inform our knowledge mobilization strategy and work to inform key knowledge users and health service delivery makers of next steps for improving linkage-to-care as well as supporting the expansion of STBBI testing and care in community settings.

Disclosure Statement

Funding for this project has been provided by the Canadian Institutes of Health Research. Funding has supported costs for personnel, equipment, and honorarium for participants. No funding body played any role in the planning or execution of the research study.

Acknowledgements

We would like to express our gratitude to the participants who graciously shared their time, perspectives, and expertise with us in Health Connect. We would like to thank CIHR for making this project possible. We respectfully acknowledge that we live and work on the unceded traditional territories of the Coast Salish peoples, which includes but is not limited to lands of the thexʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), and mi ce:p kʷətxʷiləm (Tsleil-Waututh) nations.

Poster publication date: October 2025 **Contact:** Alannah Hannigan at ahannigan@bccfe.ca

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