

Mail-Home Dried Blood Spot Self-Collection for HIV, Hepatitis C, and Syphilis Screening: A Pilot Study Among Gay, Bisexual, Trans, Two-Spirit, and Queer Men and Non-Binary People (GBT2Q) in British Columbia

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Background and Methods

Background:

- GBT2Q are disproportionately affected by HIV, Hepatitis C Virus (HCV), and syphilis.
- COVID-19 has exacerbated barriers to in-person testing.
- **We implemented and evaluated a mail-home dried blood spot (DBS) self-collection pilot intervention for HIV, HCV, and syphilis screening among GBT2Q aged 18+ in British Columbia (BC).**

Methods:

- Participants were recruited to Sex Now 2019 from across Canada via social media, socio-sexual websites/apps, and via community-based agencies from October 2019 – February 2020 (pre-COVID).
- Participants self-completed an online Sex Now questionnaire on demographics, sexual behaviours, and sexual health. The Sex Now 2019 questionnaire is freely available on CBRC's website [here](#).
- Sex Now participants living in BC who were aged 18+ could opt into this sub-study. Consenting participants were mailed a DBS self-collection kit via Purolator, and were provided with printed instructions and an online instructional video available [here](#).
- DBS were screened at the Public Health Agency of Canada for HCV, HIV and syphilis. Interested participants received their results with appropriate linkage to care.
- Participants who returned the DBS kit received a \$10 honoraria.

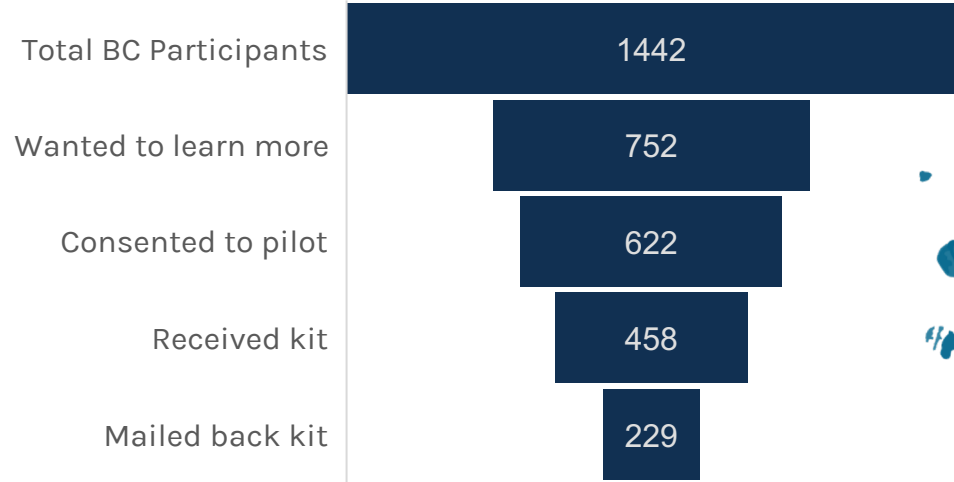
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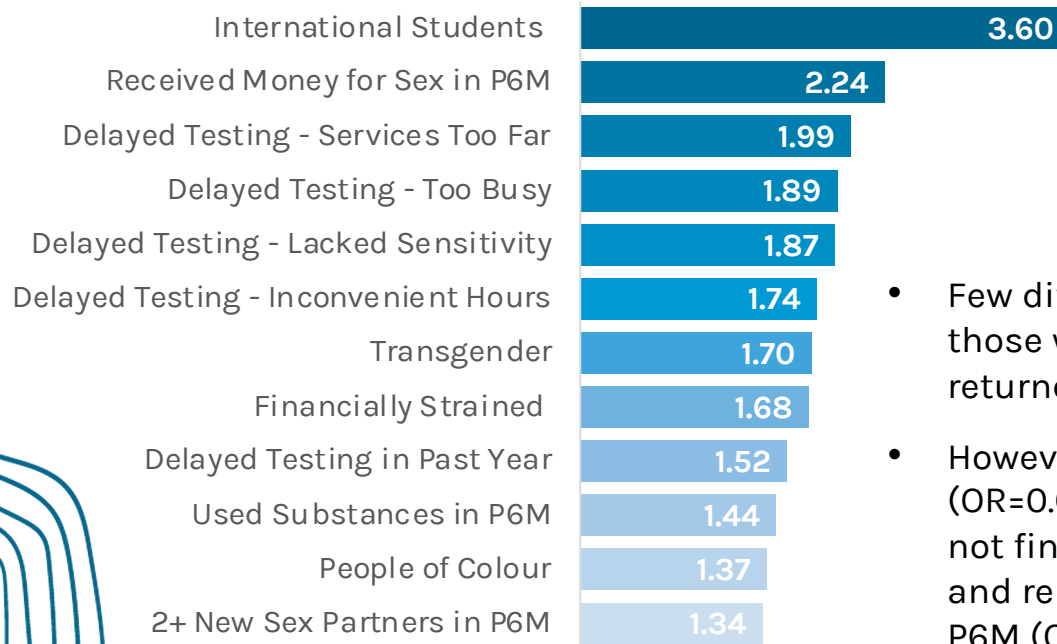
- **52% of eligible participants** wanted to learn about the pilot, **83% consented to participate**, **74% received a self-collection kit**, and **50% returned their DBS**.
- Shipping issues included incomplete mailing addresses (**n=105**) and inability to deliver by shipper (**n=59**). **Laboratory screening could be completed on 97.3% of DBS**.

- **91%** of participants had a good overall experience, **89%** would use at-home DBS again, and **94%** would recommend it to others.



Results

Odds Ratios When Comparing Participants Who Were Interested in the Pilot Versus Not



*P6M = Past 6 months

- Few differences existed between those who consented (vs not) and returned DBS (versus not).
- However, GBT2Q who were bisexual (OR=0.60), less out (OR=0.32), did not finish high school (OR=0.09), and reported transactional sex in P6M (OR=0.46) were LESS likely to return their DBS kit.

Conclusion

- Mail-home DBS self-collection reached key sub-groups of GBT2Q, was highly acceptable, and DBS specimen quality was excellent.
- This promising intervention should be evaluated in other priority populations.

Questions?

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The Sex Now 2019 survey research received funding support from Canadian Blood Services MSM Research Program funded by the federal government (Health Canada) and the provincial and territorial ministries of health. The views herein do not necessarily reflect the views of Canadian Blood Services or the federal, provincial, or territorial governments of Canada. This research project was also supported by an HCV Micro-Elimination Grant from Gilead Sciences Canada, Inc.