

HESA Evidence Brief – LGBTQ2 Health in Canada
May 2, 2019

**Addressing the High Burden of HIV and Sexually Transmitted
Blood Borne Infections (STBBIs) Among Gay, Bisexual, and
Other Men Who Have Sex with Men in Canada**

*Written evidence brief submitted by Community-Based Research Centre (CBRC)
to the Standing Committee on Health(HESA) for the Committee’s study
of LGBTQ2 Health in Canada*



INTRODUCTION

Community-Based Research Centre is pleased to submit this evidence brief outlining the important issue of HIV and sexually transmitted and blood borne infections (STBBIs) among gay, bisexual, trans, Two-Spirit, and queer men in Canada (GBT2Q) in Canada to the House of Commons Standing Committee on Health in the context of your ongoing study of LGBTQ2 health. This brief provides a review for the urgent need of the Federal government to address HIV and STTBIs among GBT2Q, as well as a range of recommended federal actions to reduce this historic and ongoing health inequity affecting GBT2Q Canadians.

PROBLEM STATEMENT

HIV and other STBBIs, including syphilis and the Human Papilloma Virus (HPV), disproportionately impact GBT2Q in Canada, resulting in significant costs to both affected individuals and the health care system. Drivers of the ongoing epidemics of HIV and STBBIs among GBT2Q include biological and behavioural factors such as high HIV prevalence and incidence among GBT2Q networks, which increase the likelihood of transmission, as well as social and structural factors such as minority stress and stigma, which can both increase behavioural risk factors and present barriers to effective care. The ongoing epidemics of HIV and STBBIs among GBT2Q can be reversed, but requires significant expansion and scale-up of effective biomedical, behavioural, and structural interventions.

PREVALENCE OF HIV AND STBBIS AMONG GBT2Q IN CANADA

GBT2Q have been the population most affected by HIV since the onset of the AIDS epidemic in the early 1980s¹, and continue to comprise the largest number of new infections each year. GBT2Q comprise approximately 50% of new infections², despite only accounting for an estimated 2-7% of the total male population³. Biological and epidemiological factors, including the high prevalence of HIV within GBT2Q networks, contribute to their heightened risk for HIV, who are estimated to be 131 times more likely to get HIV than men who do not have sex with men in Canada⁴. While declining HIV rates have been reported for other populations at risk, including people who inject drugs⁵, the number of GBT2Q diagnosed with HIV each year has generally remained stable and has even increased among some young GBT2Q¹.

Beyond HIV, GBT2Q are also disproportionally affected by other STBBIs, including syphilis and HPV^{4,6}. Rates of infectious syphilis cases among GBT2Q have been steadily increasing nationally since 2011⁷. In BC for example, syphilis cases have almost doubled in the past 5 years (558 in 2013 to 925 in 2018) of which approximately 87% were GBT2Q. This is similar to the profile of syphilis epidemics in other Canadian jurisdictions, the US, and many European countries where syphilis cases continue to be largely among men who have sex with men (MSM)⁶. Based on the

2015 Sex Now survey of GBT2Q men in Canada, approximately 40% of participants had not tested for STBBIs or HIV in the past year. In the case of HPV, prevalence of high risk strains (e.g. those that are linked to cancer) is particularly high among HIV-positive GBT2Q⁸. In comparison with the general population, MSM are about 20 times more likely to develop anal cancer⁹.

DRIVERS OF HIV/STBBIS AMONG GBT2Q

The factors shaping the ongoing epidemics of HIV and STBBIs among GBT2Q are complex and multi-layered. They overlap, intersect, and are not experienced by each person in the same way^{4,10}. They range from *structural factors* (e.g. stigma, racism and colonialism), *community factors* (e.g. population viral load, or the level of HIV treatment success within a given group), and *behavioural and biological factors* (e.g. undetectable viral load due to effective treatment), which operate at the most immediate level and determine if HIV transmission occurs⁴.

A significant driver affecting GBT2Q's vulnerability to HIV and STBBIs at multiple levels is **minority stress**, referring to the barriers and challenges associated with being a member of a stigmatized group^{11,12}. For example, at a structural level, GBT2Q face discriminatory public policies (e.g. blood donation bans for MSM¹³) and are excluded within social institutions and systems, such as education (e.g. lack of comprehensive and inclusive sex education¹⁴) and health (e.g. lack of cultural competency among health care providers¹⁵). At an interpersonal level, GBT2Q continue to experience homophobic discrimination, harassment, or violence in schools, workplaces, and community spaces.¹⁶ In CBRC's *Sex Now* survey in 2018, 22% of GBT2Q reported being discriminated against in the past year due to their sexual orientation, 20% due to their body type, 12% based on their race, and 9% based on their gender.

These harmful experiences often lead to internalized stigma, contributing to elevated rates of serious mental health issues such as anxiety, depression, problematic substance use, and suicidality, which in turn can lead to sexual risk-taking and a greater chance of infections.¹⁷ One substance which has had a particular impact on GBT2Q and sexual risk-taking is crystal meth. Research suggests that GBT2Q are as much as 20 times more likely to use crystal meth, which is highly addictive, and is increasingly administered through injection (increasing risk for HIV transmission), and has few effective treatment options for those who wish to stop using¹⁸.

The co-occurring epidemics of minority stress, mental health problems such as substance use, and HIV and STBBIs among GBT2Q is known as **syndemics**, and has been extensively researched and well-documented in Canada and around the world^{19,20}. Not only are these epidemics occurring in tandem, they are mutually reinforcing and interact synergistically to produce even greater risk and marginalization among GBT2Q²¹. However, despite strong evidence of syndemics, and the importance of integrating mental health and substance use needs within HIV and STBBI approaches with GBT2Q, most sexual health programs and services are siloed from mental health. This leads to a lack of comprehensive care overall, but also that the underlying factors contributing to poor sexual health continue to go unaddressed. For example,

unmet mental health needs are common among clients attending specialized sexual health services, which are frequently used by GBT2Q²².

In summary, the prevalence of HIV and other STBBIs such as syphilis and HPV is disproportionately high due to multiple complex factors including minority stress, syndemics, and suboptimal access to effective biomedical interventions. In order to effectively respond to these ongoing drivers of poor health and STBI transmission among GBT2Q, Canada needs to take concerted, comprehensive, and collaborative action.

POLICY ISSUES AND OPTIONS IN CANADA'S RESPONSE TO HIV AND STBBIS AMONG GBT2Q

While the overrepresentation of new HIV and STBI infections among GBT2Q has been sustained for decades, there are several opportunities to improve Canada's response by strengthening the range and scope of biomedical, behavioural, and structural interventions.

Canada needs to dramatically expand GBT2Q access to new and existing *biomedical interventions*, which reduce the biological risk and harms associated with HIV and STBI transmission, and include antiretroviral drugs, testing technologies and services, and vaccinations (for HPV and Hepatitis B and C). Antiretrovirals have now been used for decades as HIV treatment to dramatically reduce morbidity, mortality, and HIV incidence²³, and more recently have been shown to be highly effective for prevention among HIV-negative individuals (pre- and post-exposure prophylaxis, or PrEP and PEP)^{24, 25}.

But despite their effectiveness, access to antiretrovirals, for both HIV treatment and PrEP, continues to vary unevenly by province^{26, 27}. Many provinces require co-pays or deductibles, distribute only through certain pharmacies, or limit the conditions under which a drug can be prescribed. In the context of treatment, these barriers may be significantly associated with decreases in adherence, which can increase viral load and the risk of HIV transmission²⁸. While the responsibility for public medication access may lie with the provinces and territories, each should follow the lead of British Columbia and more recently, in Alberta and Saskatchewan, in making antiretroviral drugs universally available and lowering barriers to access²⁹.

On testing, Canada lags behind many other countries in the innovation of testing modalities and technologies, including rapid point-of-care tests which are performed by providers that give results within minutes. Since introduced over a decade ago, only one licensed rapid HIV test has been used in Canada, compared to seven currently available in the US. There are also Canadian rapid tests for STBBIs that are not licensed here but are used internationally. Also, Canada Post does not permit mailing of self-collected specimens for testing for STBI by mail, which is not the case in the US or Europe, requiring shipment by courier services and increased cost to program operators. Similarly, there are no home-testing or self-testing kits for HIV licensed in Canada, an approach that is highly acceptable and increases testing. Even existing testing

services vary significantly depending on the specific city, province, or even region, as rapid point-of-care HIV testing is not available in the Atlantic region, with the exception of a few research study sites.

With regard to STBBIs other than HIV, additional investment in biomedical interventions are needed for syphilis and HPV among GBT2Q. With regard to syphilis, rates have been elevated and increasing among GBT2Q in Canada since 2011. To date, syphilis prevention has relied on behavioural interventions such as campaigns to increase condom use and testing, or to reduce the number of sexual partners, as well as public health partner notification services, with relatively little success in reversing trends. The use of antibiotic prophylaxis (e.g. doxycycline) for prevention of STBBIs, including syphilis, is a potential biomedical intervention that is currently being investigated through research in several countries including Canada³⁰.

While the best strategy for protecting GBT2Q against HPV-related diseases is through universal male vaccination, as it does not require patients to disclose their sexuality to health care providers³¹, publicly-funded Gardasil vaccination among GBT2Q is limited to school-based programs and in some provinces, public health initiatives which provide coverage to MSM through age 26. This narrow access for HPV vaccination is not consistent with Canada's own National Advisory Committee on Immunization (NACI), which issued a Grade A recommendation for vaccination of all MSM over the age of 9³². The limited access for HPV vaccination among GBT2Q is another example of Canada lagging behind other countries, including Europe where some programs cover vaccination through age 45. Studies in Canada and internationally show that HPV vaccination rates among MSM are low, ranging from 7% to 21%³³, and that they generally have low knowledge about HPV-related cancer³⁴. This underscores the pressing need to invest in the development of awareness campaigns and resources on HPV and GBT2Q, as well as expanding access to increase their vaccine uptake.

RECOMMENDATIONS

With consideration to the policy issues and options for improving Canada's response to HIV and STBBIs among GBT2Q, we recommend the Federal government undertake the following:

1. **Create a dedicated HIV and STBBI prevention fund for GBT2Q** in order to:
 - a) Establish an enhanced, community-led program of intervention development that address biomedical, behavioural, and structural drivers of the HIV and STBBI epidemics. Specifically, this program should align with the Public Health Agency of Canada's (PHAC) Community Action Fund on HIV, Hepatitis C, and STBBIs, as well as the new Pan-Canadian STBBI Framework for Action³⁵ and generate:
 - a. Interventions to address *syndemics* among GBT2Q, including programs and services to support problematic substance use and mental health needs
 - b. Interventions to address *minority stress* among GBT2Q, including programs and services to reduce stigma, build resiliency, and increase cultural competency in the health system

- c. Interventions to facilitate implementation and scale-up of *effective testing approaches*, including new test technologies and modalities (which require licensing of new tests, regulatory changes to Canada Post to enable shipment of specimens for testing)

2. Exercise greater leadership through federal health, regulatory, and related agencies and programs, in order to:

- a) Scale-up new testing approaches that make the best use of new and effective test technologies, which empower GBT2Q to get tested. Concrete actions to facilitate this recommendation include:
 - a. Facilitating licensing opportunities for new types of rapid or point-of-care STBBI tests in Canada through Health Canada's Therapeutic Products Directorate, and approving their use for home or self-testing.
 - b. Expansion of the National Microbiology Laboratory's dried blood spot (DBS) testing for HIV, Hepatitis B and C, and syphilis, which can be used outside traditional health care settings and has been shown to be highly feasible and acceptable.
 - c. Updating Canada Post internal policies to be consistent with current Canadian regulations (i.e., Transportation of Dangerous Goods) and reference standards (IATA) which do permit sending biological specimens for STBBI testing (e.g., DBS, self-collected specimens) by general mail with appropriate packaging and labeling.
- b) Address gaps in coverage for essential biomedical interventions for HIV and STBBIs among GBT2Q, including antiretroviral medications for both HIV treatment and prevention (e.g. PrEP and PEP) and HPV vaccinations.
 - a. As provision of medical treatments is a provincial responsibility, this will require creating additional funding mechanisms earmarked to extend coverage of HIV antiretroviral treatment and prevention, as well as the HPV vaccine Gardasil. The federal strategy of reimbursements to provinces for coverage of Hepatitis C cure treatments represents a possible funding model for consideration.
- b) Increase the capacity of the health system to respond to the needs of GBT2Q Canadians. Concrete actions to facilitate this include:
 - a. Updating current national sexual health guidelines such as the *Canadian Guidelines for Sexually Transmitted Infections* to be inclusive for all sexual & gender minorities.
 - b. Incorporating mental health and substance use assessments within guidelines for sexual health screening and treatment in order to facilitate greater opportunities for intervention of underlying drivers of sexual risk and STBBI transmission.
 - c. Adding GBT2Q to the list of priority populations for research or program funding applications by CIHR, PHAC, and other relevant agencies.



WHO WE ARE

Community-Based Research Centre (CBRC) is a national organization committed to promoting the health of gay, bisexual, queer, and other men who have sex with men (cis and trans) and Two Spirit (GBT2Q) people in Canada. CBRC's core pillars - community-led research, knowledge exchange, network building, and leadership development - position the organization as a thought leader, transforming ideas into actions that make a difference in our communities.

CBRC produces *Sex Now*, Canada's largest and longest running survey of GBT2Q health which was first developed in BC to respond to rising HIV rates. Often referred to as "the gay census", *Sex Now* has become an essential source of data on the health and well-being of GBT2Q in Canada, and is widely used by community, public health, research, and policy stakeholders. Since 2005, CBRC has organized the *Summit*, an annual two-day knowledge exchange and capacity building conference on GBT2Q health. More information on *Sex Now*, *Summit*, and our diverse range of knowledge exchange and intervention development programs are available at CBRC's website, www.cbrc.net.

REFERENCES:

- ¹ Government of Canada. *Summary: Estimates of HIV Incidence, Prevalence and Proportion Undiagnosed in Canada, 2014*. Ottawa: Public Health Agency of Canada; 2015. ([link](#))
- ² Haddad N, Li JS, Totten S, McGuire M. HIV in Canada—Surveillance Report, 2017. *Can Commun Dis Rep* 2018;44(12):324-32. ([link](#))
- ³ Rich A, Lachowsky NJ, Cui Z, et al. Estimating the Size of the MSM Population Using Multiple Methods and Data Sources in Vancouver, British Columbia. Presented at the: IAS; 2015; Vancouver, Canada. ([link](#))
- ⁴ Yang Q, Ogunnaikie-Cooke S, Halverson. Estimated national HIV incidence rates among key sub-populations in Canada, 2014. In: Winnipeg, Canada: CAHR; 2016:EPH3.5.
- ⁵ British Columbia. Provincial Health Officer (2014). Kendall P. HIV, Stigma and Society: Tackling a complex epidemic and renewing HIV prevention for gay and bisexual men in British Columbia. Provincial Health Officer's 2010 Annual Report. Victoria, BC: Ministry of Health. Page 47. ([link](#))
- ⁶ STI in British Columbia: Annual Surveillance Report 2016. Vancouver, BC: BC Centre for Disease Control; 2018. ([link](#))
- ⁷ Public Health Agency of Canada. Population-Specific HIV/AIDS Status Report: Gay, Bisexual, Two-Spirit and Other Men Who Have Sex With Men - Public Health Agency of Canada. ([link](#))
- ⁸ Gee J, Weinbaum C, Sukumaran L, et al. Quadrivalent HPV vaccine safety review and safety monitoring plans for nine-valent HPV vaccine in the United States. *Hum Vaccin Immunother* 2016;12(6):1406-1417 ([link](#))
- ⁹ Poon, M.K.L. et al. HIV-positive MSM's knowledge of HPV and anal cancer self-sampling: A scoping review. *Current Oncology*, [S.l.], v. 25, n. 1, p. e83-e89, feb. 2018. ([link](#))
- ¹⁰ Mustanski B, Garofalo R, Herrick A, Donenberg G. Psychosocial health problems increase risk for HIV among urban young men who have sex with men: preliminary evidence of a syndemic in need of attention. *Ann Behav Med Publ Soc Behav Med* 2007; 34(1): 37-45. ([link](#))
- ¹¹ Meyer I. Minority stress and mental health in gay men. *J Health Soc Behav* 1995; 36(1): 38-56.
- ¹² Hatzenbuehler ML. Structural Stigma and Health Inequalities: Research Evidence and Implications for Psychological Science. *Am Psychol* 2016; 71(8): 742-751. ([link](#))

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- ¹³ Ontario HIV Treatment Network: Blood donor deferral policies for men who have sex with men across high-income countries. *Rapid Response* (2017). ([link](#))
- ¹⁴ Saewyc EM, Konishi C, Rose HA, et al. School-based strategies to reduce suicidal ideation, suicide attempts, and discrimination among sexual minority and heterosexual adolescents in Western Canada. *Int. J. Child, Youth Fam. Stud.* 2014;1:89–112 ([link](#))
- ¹⁵ Ontario HIV Treatment Network: Facilitators and barriers to health care for lesbian, gay, and bisexual (LGB) people. *Rapid Response* (2014). ([link](#))
- ¹⁶ Finneran C, Chard A, Sineath C, et al. Intimate Partner Violence and Social Pressure among Gay Men in Six Countries. *West J Emerg Med* 2012;13(3):260-271 ([link](#))
- ¹⁷ Meyer IH. Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations; Conceptual Issues and Research Evidence. *Psychol. Bull.* 2003;129:674–97. ([link](#))
- ¹⁸ Knight R. Investments in implementation science are needed to address the harms associated with the sexualized use of substances among gay, bisexual and other men who have sex with men. *J Int AIDS Soc.* 2018;21(6):e25141. ([link](#))
- ¹⁹ Singer M, Bulled N, Ostrach B, Mendenhall E. Syndemics and the biosocial conception of health. *The Lancet* 2017; 389(10072): 941-950. doi:10.1016/S0140-6736(17)30003-X.
- ²⁰ Card KG, Lachowsky NJ, Armstrong HL, et al. The additive effects of depressive symptoms and polysubstance use on HIV risk among gay, bisexual, and other men who have sex with men. *Addict Behav* 2018; 82: 158-165. ([link](#))
- ²¹ Mimiaga MJ, O’Cleirigh C, Biello KB, et al. The effect of psychosocial syndemic production on 4-year HIV incidence and risk behavior in a large cohort of sexually active men who have sex with men. *J Acquir Immune Defic Syndr* 1999 2015; 68(3): 329-336. ([link](#))
- ²² Salway T, Ferlatte O, Shoveller J et al. The Need and Desire for Mental Health and Substance Use-Related Services Among Clients of Publicly Funded Sexually Transmitted Infection Clinics in Vancouver, Canada. *J Public Health Manag Pract.* 2019 May/Jun;25(3):E1-E10. doi: 10.1097/PHH.0000000000000904.
- ²³ Montaner JSG, Lima VD, Harrigan PR, et al. Expansion of HAART Coverage Is Associated with Sustained Decreases in HIV/AIDS Morbidity, Mortality and HIV Transmission: The “HIV Treatment as Prevention” Experience in a Canadian Setting. *PLoS ONE* 2014; 9(2): e87872. ([link](#))
- ²⁴ Tan DHS, Hull MW, Yoong D, et al. Canadian guideline on HIV pre-exposure prophylaxis and nonoccupational postexposure prophylaxis. *CMAJ* 2017; 189(47): E1448-E1458. ([link](#)).
- ²⁵ McCormack S, Dunn DT, Desai M, et al. Pre-exposure prophylaxis to prevent the acquisition of HIV-1 infection (PROUD): effectiveness results from the pilot phase of a pragmatic open-label randomised trial. *Lancet Lond Engl* 2016; 387(10013): 53-60. ([link](#))
- ²⁶ Access to HIV and Hepatitis C Drugs: Federal, Provincial and Territorial Drug Access Programs. *CATIE* 2018. ([link](#))
- ²⁷ Yoong D. *Access and Coverage of Antiretroviral Drugs through Canada’s Provincial and Territorial Drug Programs.* Toronto, Ontario: St. Michael’s Hospital; 2018. ([link](#))
- ²⁸ Eaddy MT, Cook CL, O’Day K, Burch SP, Cantrell CR. How Patient Cost-Sharing Trends Affect Adherence and Outcomes. *Pharm Ther* 2012; 37(1): 45-55. ([link](#))
- ²⁹ Riegar S. Alberta government announces universal coverage for HIV-prevention drug PrEP. CBC, September 2018. ([link](#))
- ³⁰ Molina JM, Charreau I, Chidiac C, et al. Post-exposure prophylaxis with doxycycline to prevent sexually transmitted infections in men who have sex with men: an open-label randomised substudy
- ³¹ Canadian Pediatric Society. Human papillomavirus vaccine for children and adolescents: Position Statement. Jun 2018. ([link](#))
- ³² Public Health Agency of Canada. Update on the recommended Human Papillomavirus (HPV) vaccine immunization schedule: An Advisory Committee Statement (ACS). ([link](#))
- ³³ Cummings T, Kasting ML, Rosenberger JG, Rosenthal SL, Zimet GD, Stupiansky NW. Catching up or missing out? Human papillomavirus vaccine acceptability among 18- to 26-year-old men who have sex with men in a US national sample. *Sex Transm Dis* 2015;42(1):601–6.
- ³⁴ Moores A, Phillips JC, O’Byrne P, MacPherson P. Anal cancer screening knowledge, attitudes, and experiences among men who have sex with men in Ottawa, Ontario. *Can J Hum Sex* 2015;24(3):228–36.
- ³⁵ Public Health Agency of Canada. Reducing The Health Impact of Sexually-Transmitted and Blood-Borne Infections in Canada by 2030: A Pan-Canadian Framework for Action ([link](#))