PUBLIC HEALTH AGENCY OF CANADA

POPULATION-SPECIFIC HIV/AIDS STATUS REPORT

GAY, BISEXUAL, TWO-SPIRIT AND OTHER MEN WHO HAVE SEX WITH MEN

PROTECTING CANADIANS FROM ILLNESS

Public Health Agency of Canada
Agence de la santé publique du Canada

Canada

TO PROMOTE AND PROTECT THE HEALTH OF CANADIANS THROUGH LEADERSHIP, PARTNERSHIP, INNOVATION AND ACTION IN PUBLIC HEALTH.

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FOREWORD

The Public Health Agency of Canada, with the support of its many partners, is pleased to release this status report as part of a series of reports[1] intended to summarize current knowledge about the impact of HIV/AIDS among key populations in Canada. Communities, governments, public health practitioners, non-governmental organizations, researchers and others are encouraged to use this report to inform the future direction of HIV/AIDS policy, programming and research to positively affect the health and well-being of gay, bisexual, two-spirit and other men who have sex with men.

This series of status reports was initiated to support the actions set out in *The Federal Initiative to Address HIV/AIDS in Canada*,[2] the Government of Canada's framework for investments in HIV/AIDS, and to provide a comprehensive evidence base for other partners and stakeholders involved in the Canadian response to the epidemic. Launched in 2005, the Federal Initiative identifies a need for more effective interventions and improved HIV/AIDS prevention, research, diagnosis, care, treatment and support initiatives for specific populations at risk of, or affected by, HIV and AIDS. These populations include people from countries where HIV is endemic, gay men and other men who have sex with men, people who use injection drugs, Aboriginal Peoples, people in prisons, youth at risk, women and people living with HIV/AIDS.

These reports use a determinants of health approach to examine vulnerability to, and resilience against, HIV infection. Determinants of health are the range of social, economic, environmental and personal factors that influence the health status of individuals and populations. They contribute to vulnerability for HIV infection and continue to affect the health and quality of life of people living with HIV/AIDS. This series of reports supports the Agency's efforts to identify and address health disparities and influence the determinants of health. (1)

Gay, bisexual, two-spirit and other men who have sex with men continue to be the population most affected by HIV and AIDS in Canada. This is the first time the Public Health Agency of Canada has attempted to present HIV/AIDS-related information relevant to this population in a comprehensive manner. The development of this status report was guided by a national working group with expertise in research, epidemiology, community development, policy and program development, and lived experience. The working group's input and advice has ensured that the report presents the most current, relevant and innovative research and responses that exist in Canada today.

This report provides a detailed overview of key issues affecting gay, bisexual, two-spirit and other men who have sex with men in Canada. As is the case in any work of this nature, limitations were encountered in the data collection, analysis and reporting phases. The Agency welcomes comments on the report to assist with the development of future population-specific HIV/AIDS status reports.

Despite major advances in testing and treatment, as well as the development of a robust domestic and global response over the last 30 years, HIV/AIDS continues to be a major public health challenge that requires a concerted, collaborative response. An understanding of the underlying factors and conditions that affect the vulnerability and resilience of gay, bisexual, two-spirit and other men who have sex with men is key to structuring an effective response to HIV and AIDS. It is with this objective in mind that this report was prepared.

REFERENCE

(1) Public Health Agency of Canada. The Public Health Agency of Canada – Strategic Plan: 2007 – 2012, Information, Knowledge, Action. Ottawa: Public Health Agency of Canada; 2007.

[1] Published Population-specific status reports include *People from Countries where HIV is Endemic – Black people of African and Caribbean descent living in Canada, Aboriginal Peoples* and *Women*.

[2] More information on *The Federal Initiative to Address HIV/AIDS in Canada* is available at http://www.phac-aspc.gc.ca/aids-sida/fi-if/index-eng.php.

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LIST OF TERMS

Aboriginal Peoples: Refers to First Nations, Inuit and Métis as recognized under the Constitution Act, 1982. These are distinct populations with unique cultural, linguistic, geographic and historic characteristics.

Acquired Immunodeficiency Syndrome (AIDS): A condition that describes an advanced stage of HIV infection. With AIDS, the virus has progressed, causing significant loss of white blood cells (CD4 cells) and cancers or infections that result from immune system damage. An AIDS diagnosis is made if a person living with HIV is diagnosed with one or more of the clinical conditions characterized as "AIDS-defining illnesses". Antiretroviral therapy can suppress the HIV virus and slow the progression of the disease. Like HIV, there is no known cure for AIDS.

Barebacking: Also known as 'raw sex' or 'skin to skin sex'. Although there is some inconsistency in the use of the term, barebacking has typically been defined in the literature as "intentional anal sex without a condom with someone other than a primary partner."

Bathhouse: A commercial space, typically equipped with bathing facilities such as showers, saunas and/or steam rooms, which is designed to enable sexual and social encounters among gay and other men who have sex with men.

Bisexual: A person who is attracted sexually and emotionally to both males and females.

Casual male sex partner: A man with whom an individual had or has sexual relations once or a few times and who the individual does not know very well. A casual partner does not include regular partners or men to whom an individual has received or given money, drugs or other goods or services in exchange for sex.

Coming out: The process through which lesbian, gay, bisexual and transgender (LGBT) people acknowledge and disclose their sexual orientation or gender identity and integrate this understanding into their personal and social lives.

Ethnocultural: Refers to the ethnic or cultural origins of an individual or population group.

Femininity: A set of attributes, behaviours, and roles generally associated with girls and women. Femininity is made up of both socially defined and biologically created factors. This makes it distinct from the simple definition of the biological female sex, as women, men, and transgender people can all exhibit feminine traits.

First Nations: A term which usually refers to both Status and Non-Status Indians. First Nations People are one of the three recognized Aboriginal peoples in Canada, along with Métis and Inuit.

Gay: A person who is sexually and emotionally attracted to members of the same sex. The word gay can refer to both males and females, but is most commonly used to identify males.

Gender: Refers to the array of socially-determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis. Distinct from sex.

Hepatitis C virus (HCV): A virus that infects the liver. Prolonged and acute hepatitis C infection can often result in liver disease and cirrhosis. The virus is transmitted largely by blood transfusion or percutaneous inoculation, such as needle sharing among people who inject drugs.

Heterosexism: The assumption that everyone is or should be heterosexual and that this sexual orientation is superior. Heterosexism is often the belief system that underlies homophobia.

HIV-endemic country: An HIV-endemic country is defined as having an adult prevalence (ages 15-49) of HIV that is 1.0% or greater and one of the following: (1) 50% or more of HIV cases attributed to heterosexual transmission; (2) a male to female ratio of 2:1 or less; or (3) HIV prevalence greater than or equal to 2% among women receiving prenatal care.

Homophobia: An irrational fear of, aversion to, or discrimination against gay or lesbian people or those perceived to be gay or lesbian. Internalized homophobia occurs when homophobic prejudices and biases are integrated into an individual's belief system. External homophobia occurs when internal homophobic feelings shape people's behaviour towards others that they perceive as different; for example, by prompting social avoidance, verbal abuse, discrimination and in some cases violence. Institutional homophobia refers to discriminatory practices and policies based on sexual

orientation exercised by governments, businesses, religious organizations, educational institutions and other institutions.

Human immunodeficiency virus (HIV): The virus that causes AIDS. This virus is passed from one person to another through blood-to-blood, sexual contact, and from mother-to-child through pregnancy, delivery, or breast-feeding. HIV attacks the immune system, resulting in a chronic progressive illness that leaves people vulnerable to opportunistic infections and cancers. There is no known cure or vaccine for HIV but, for most, the virus can be managed through daily doses of antiretroviral medication. In the absence of treatment with antiretroviral medication, HIV infection will progress to AIDS.

Injection drug use (IDU): An epidemiological classification for HIV transmission among people who use injection drugs.

Inuit: Canada's Aboriginal people of the Arctic. Inuit are one of the three recognized Aboriginal peoples in Canada, along with the First Nations and Métis.

Lesbian: A woman who is attracted sexually and emotionally to other women.

LGBTTQ: A commonly used acronym for the constellation of lesbian, gay, bisexual, transgender, transsexual, two-spirit, and queer identities. Sexual minority is a synonymous term.

Masculinity: Refers to the set of qualities or characteristics considered typical of or appropriate to a man.

Men who have sex with men (MSM): An epidemiological classification for HIV transmission.

Men who have sex with men and inject drugs (MSM-IDU): An epidemiological classification for HIV transmission.

Métis: One of the three recognized Aboriginal Peoples of Canada, along with First Nations and Inuit. Métis are people of mixed Aboriginal and European ancestry.

Population health approach: A population health approach focuses on improving the health status of the population. Action is directed at the health of an entire population, or sub-population, rather than individuals. Focusing on the health of populations also necessitates the reduction in inequalities in health status between population groups. An underlying assumption of a population health approach is that reductions in health inequities require reductions in material and social inequities.

Positive (or "poz") prevention: An approach that engages people living with HIV/AIDS in activities that can contribute to preventing onward transmission of HIV.

Regular male sex partner: A man with whom an individual had or has an on-going sexual relationship. A regular partner can be a life partner, a boyfriend, a lover, etc., but does not include casual partners or men to whom an individual has received or given money, drugs or other goods or services in exchange for sex.

Risk factor: A factor associated with an increased chance of getting a disease or infection. It may be a causal determinant or simply a risk marker. Factors associated with decreased risk are known as protective factors.

Sex: Refers to the biological characteristics that generally distinguish males and females. Biological differences include such things as anatomy, genetics, hormones, metabolism and physiology. Distinct from gender.

Sexual health: A state of physical, mental and social well-being in relation to sexuality, requiring a positive and respectful approach to sexuality and sexual relationships as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.

Sexually transmitted infections (STIs): A group of infections that spread from one person to another through sexual contact. This can be vaginal, oral or anal sex, and sometimes skin-to-skin contact.

Sex work: The exchange of sexual services for money or other goods or services.

Transgender: A person whose gender identity, outward appearance, expression and/or anatomy does not fit into conventional expectations of male or female.

Transman or transsexual man: A term used to describe a person, born female or physically assigned as female at birth, whose biological sex is not consistent with his sense of self. As a result, he lives and identifies as a man, and may seek sex reassignment surgery. Female to male (FTM) is another term used to describe a transmen or transgender man.

Transphobia: Refers to the fear and/or hatred of transgender individuals and is exhibited by prejudice, discrimination, intimidation, or acts of violence.

Transwoman or transsexual woman: A term used to describe a person, born male or physically assigned as male at birth, whose biological sex is not consistent with her sense of self. As a result, she lives and identifies as a woman, and may seek sex reassignment surgery. Male-to-female (MTF) is another term used to describe a transwoman or transgender women.

Two-Spirit: A term that refers to sexual orientation and/or gender identity within some Aboriginal cultures. The organization 2-Spirited People of the 1st Nations defines the term as follows: "Native people who are gay, lesbian, bisexual, transgender, other gendered, third/fourth gendered individuals that walk carefully between the worlds and between the genders". The term is primarily used by some First Nations.

EXECUTIVE SUMMARY

Since the beginning of the HIV/AIDS epidemic in the early 1980s, gay, bisexual, two-spirit and other men who have sex with men have remained the population most affected by HIV and AIDS in Canada. The Public Health Agency of Canada estimates that in 2011, the exposure category of men who have sex with men (MSM) accounted for 46.6% of new HIV infections and 46.7% of prevalent HIV infections in Canada.

The term "men who have sex with men" is used to denote a specific transmission route for HIV in epidemiological data and does not refer to anyone's personal identity. Outside epidemiological discussions, this report uses the term MSM only because not all men who have sex with men identify as gay, bisexual, or two-spirit.

DEMOGRAPHIC PROFILE

Few Canadian studies have examined the demographic characteristics of gay and other MSM outside the context of HIV/AIDS. As a result, the total number of gay, bisexual, two-spirit and other MSM in Canada is not known. The majority of self-identified gay, bisexual and other MSM surveyed in a variety of Canadian studies identified White as their ethnocultural background.

According to an analysis of data from the 2007 – 2008 *Canadian Community Health Survey*, men who self-identified as gay or bisexual resided primarily in the three most populous provinces in Canada: Quebec, Ontario and British Columbia. These men reported higher levels of education than self-identified heterosexual men, but similar levels of income. Gay and bisexual men also reported the same levels of general health, including mental health, as heterosexual men. However, bisexual men reported poorer levels of mental health and both groups reported more chronic conditions and mood and anxiety disorders than heterosexual men. Gay and bisexual men also reported having more unmet health needs in the past year than heterosexual men.

EPIDEMIOLOGY OF HIV AND AIDS

From 1985 to 2011, over half (54.7%) of the 69,856 positive HIV tests among adults with a known exposure category were attributed to MSM. The number of new positive HIV test reports among adults attributed to the MSM exposure category has remained relatively stable between 2002 – 2011, with a peak of 593 cases in 2008. From 1998 to 2011, white men accounted for the majority (81.1%) of positive HIV test reports attributed to the MSM exposure category. From 1979 to the end of 2011, the MSM exposure category accounted for 64.8% of all adult AIDS cases (≥ 15 years) with a known exposure category. In 2011, nearly one third (30.5%) of the 188 new AIDS cases reported to the Agency were attributed to the MSM exposure category.

Data from Phase 1 of M-Track, a Public Health Agency of Canada behavioural and biological surveillance system of HIV and other sexually transmitted and blood-borne infections (STBBIs) among MSM in Canada, found an HIV prevalence of 15.1% among participants who provided a biological sample of sufficient quantity for testing and who completed a questionnaire. Of these, 19% were unaware of their HIV-positive status.

DETERMINANTS OF HEALTH

Homophobia and related stigma and discrimination have a significant, overarching impact on the determinants of health experienced by gay and other MSM, which in turn influence the population's vulnerability to HIV. Gay and other MSM who are members of ethnocultural minority groups can face a double burden of homophobia from within and outside their communities, as well as racism. Research suggests that homophobia is linked to negative mental health outcomes, increased social exclusion and decreased access to social support and health services for gay and other MSM. International research has demonstrated an association between experiences of homophobic victimization in youth and a higher rate of health issues, such as depression, anxiety, substance use, sexual risk behaviours and suicide. Canadian research also indicates that gay and other sexually diverse youth are more likely to experience harassment and victimization

than their heterosexual peers. Experiences of childhood abuse, including sexual abuse, are also linked to an increased likelihood of engaging in HIV risk behaviours, including sexual risk taking and drug use. Stigma and discrimination can also reduce access to health care and other important sources of support for gay and other MSM.

Unprotected anal sex is the most common risk factor for HIV infection among gay and other MSM, and is related to various interconnected environmental, psychosocial, and personal factors. Strategies to reduce one's risk of HIV infection rely on individuals knowing their HIV status and accurately informing one another before engaging in risky sexual behaviour. This is often complicated by some men's unwillingness to disclose their HIV status due to shame, fear, or insecurity. HIV testing is quite high among gay and other MSM. It is estimated that in 2011, 20% of gay and other MSM in Canada who were HIV-positive were unaware of their status, which is lower than the estimated 25% of HIV-positive people in the general population who were unaware of their status.

Romantic relationships, friendships, and gay-specific venues and activities are all cited as important sources of social support that promote resilience against HIV infection and empower those living with it. The gay community's history of activism, including the development of an early and effective community response to AIDS when it first emerged, continues to be a source of resilience against HIV.

CURRENT RESEARCH

A total of 48 Canadian research projects underway from 2006 to 2011 that focused on gay, bisexual, two-spirit and/or other MSM were identified. Over three quarters of the projects took place in Ontario, Quebec or British Columbia. The main areas of investigation were HIV prevention (32 projects), sexual risk behaviours (20 projects), and community research capacity, dissemination and knowledge transfer (19 projects). The projects identified also examined access to care and treatment (11 projects); homophobia, stigma and discrimination (10 projects); and sources of vulnerability to HIV infection (10 projects). Fewer than 10 projects were found for each of the following areas: culture, mental health, income and social status, social support networks, and social and physical environments. Half of the projects focused on one or more specific populations of gay and other MSM, primarily those living with HIV/AIDS (14 projects), as well as gay and other MSM from countries where HIV is endemic (4 projects), trans people (4 projects), gay and other MSM who use drugs (3 projects), youth (1 project) and Aboriginal Peoples (1 project). Areas identified for further research include the following: vulnerability to, and resiliency against, HIV; specific populations of gay and other MSM, such as older men, ethnocultural minority men, men living in rural areas, men in prison, men engaged in sex work, MSM who do not identify as gay or bisexual; HIV prevention, care, treatment, support and HIV co-infections; and research on gay men's health not specifically tied to HIV vulnerability and resiliency.

POLICY AND PROGRAM RESPONSE

The report examined the current response to HIV/AIDS among gay and other MSM at both the policy and program levels. This included an overview of population-specific strategies at the national and provincial/territorial levels, population-specific networks, coalitions, advisory bodies and organizations and projects focused on the delivery of programs addressing HIV among gay and other MSM. A variety of organizations are involved in delivering prevention, care, treatment and support services to gay and other MSM. The majority of projects identified were delivered by AIDS service organizations; however, community health, social service and governmental organizations, and organizations serving lesbian, gay, bisexual, two-spirit and queer populations were also identified as a key part of the programmatic response. Most of the projects serving gay and other MSM took place in Ontario, Quebec and British Columbia. Over one third of the projects focused on a specific subpopulation of gay and other MSM, including people from specific ethnocultural communities, Aboriginal Peoples, youth, people living with HIV/AIDS, transmen, gay and other MSM with disabilities, sex workers, and people with substance use issues.

Only Quebec had a provincial HIV/AIDS strategy specific to gay men. Several other jurisdictions identified gay men and/or MSM as a priority population under more generalized HIV/AIDS or sexually transmitted and blood-borne infections strategies. In addition, community-based networks or coalitions addressing HIV/AIDS among gay and other MSM were identified in Ontario, Manitoba and British Columbia.

CONCLUSIONS

Communities, organizations and governments have taken up the challenge and are doing their part to reduce HIV transmission in this population, and to meet the needs of gay, bisexual, two-spirit and other MSM living with, or at risk of, HIV/AIDS. Despite these important and significant efforts, much remains to be done. Effective, tailored and continued efforts in preventing the transmission of HIV and improving the quality of life of gay and other MSM living with HIV are required to successfully address the epidemic within this population.

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CHAPTER 1 – INTRODUCTION

This Public Health Agency of Canada status report focuses on HIV/AIDS among gay, bisexual, two-spirit and other men who have sex with men in Canada. These populations share common HIV risk and resiliency factors. Nonetheless, this report recognizes the distinct identities of gay, bisexual, two-spirit and heterosexual men who are part of this population, as well as the diversity of identities and experiences related to ethnicity, age, socioeconomic status, sexual orientation, gender identity and other factors within these groups. In particular, the report recognizes that openly gay, bisexual and two-spirit men have unique identities, form distinct communities within the larger Canadian society and have shared histories as minority communities in Canada. Men who have sex with men who do not identify as gay, bisexual or two-spirit do not generally share these identities, histories and perspectives.

The term "men who have sex with men" (MSM) is an epidemiological category that denotes a specific *transmission route* for HIV. As a result, the term encompasses gay, bisexual, two-spirit and other men who have sex with men. Members of the National Expert Working Group, who guided the development of this report, as well as other researchers, have noted that the use of this term is problematic, as it can be seen to mask gay, bisexual and two-spirit identities, histories and communities by reducing them to a set of sexual practices. This report acknowledges the limitations of this term. Outside epidemiological discussions, this report only uses the term to highlight the fact that not all men who have sex with men identify as gay, bisexual, or two-spirit.

This report summarizes available evidence from Canadian sources related to gay, bisexual, two-spirit and other men who have sex with men, including the following: demographic characteristics; the burden of HIV/AIDS on this population; factors which impact on this population's vulnerability to, and resiliency against, HIV/AIDS; and research and response initiatives in Canada. The report takes a population health approach, which is in keeping with the Agency's approach to public health in its ongoing efforts to protect and promote the health of Canadians. A population health approach uses evidence to examine how determinants outside the health sector (i.e., a variety of social and economic factors) affect an individual's health status. This report pays particular attention to those determinants that increase or decrease the vulnerability or susceptibility to HIV infection and AIDS of gay, bisexual, two-spirit and other MSM. The report also examines determinants that contribute to resilience against HIV infection and AIDS among gay, bisexual, two-spirit and other MSM.

> A population health approach focuses on improving the health status of the population. Action is directed at the health of an entire population, or sub-population, rather than individuals. Focusing on the health of populations also necessitates the reduction in inequalities in health status between population groups. An underlying assumption of a population health approach is that reductions in health inequities require reductions in material and social inequities. (1)

Determinants examined in this report include biology and genetic endowment, gender, healthy child development, culture, social support networks, income and social status, social and physical environments, health services, and personal health practices and coping skills. In addition, this report considers homophobia, heterosexism and related stigma and discrimination that affect the health of gay, bisexual, two-spirit and other MSM.

These determinants of health may affect an individual's likelihood of engaging in risk behaviours, such as having unprotected sex or using contaminated needles, which put them at higher risk of becoming infected with HIV. In this context, risk is not absolute, but based on probability; therefore, not everyone experiences adverse outcomes. (2) Chapter 4 provides a more detailed discussion of the relationship between the determinants of health, vulnerability and resiliency.

It should be noted that an individual, group or community can overcome negative determinants of health by adopting approaches that foster resilience—that is, protective factors that mitigate risk. In preparing this report, the National Expert Working Group emphasized the importance of highlighting sources and examples of resilience among gay and other MSM living with, and at risk of, HIV/AIDS. This report integrates evidence of resilience where possible.

1.1 METHODOLOGY

This report uses the following types of evidence: peer-reviewed and grey literature,[3] which includes published and unpublished sources. The report focuses on print evidence; nonetheless, it also integrates the voices of gay and other MSM living with, and affected by, HIV/AIDS in Chapter 4,

[3] Used here to refer to documents that have not been formally published, such as conference abstracts, theses, dissertations and government or non-profit research reports.

using personal quotations. These are provided in an attempt to better connect the reader with the evidence presented.

To support the development of this status report, the Public Health Agency of Canada established an Expert Working Group composed of community and population representatives, non-governmental organizations, researchers and policy and program experts. The working group acted as an advisory body, providing guidance and feedback on the report process, themes and drafts. The non-governmental working group members were selected following a national open call based on their personal and professional expertise on issues related to HIV/AIDS and gay, bisexual, two-spirit and other MSM. The working group also included representation from relevant areas of the Agency.

The methodology for each chapter was designed to ensure that the most current and relevant evidence was synthesized and presented. Demographic data were extracted from available sources, including Statistics Canada. Epidemiological information and surveillance data were gathered from reports published by the Agency and other published and unpublished data. Data and information on vulnerability to, and resilience against, HIV/AIDS among gay, bisexual, two-spirit and other MSM were collected from peer-reviewed publications and grey literature. The literature included in the report met the following criteria: published between 2002 and 2011; focused on gay, bisexual, two-spirit or other MSM in Canada; addressed one or more of the health determinants related to HIV or AIDS, or characterized HIV or AIDS in the context of prevention, care, treatment, support or diagnosis for gay, bisexual, two-spirit or other MSM; and written in English or French. A list of search terms and the databases searched can be found in Appendix A. Additional information was also included in the report to provide context and address gaps identified by the working group.

Information from current research underway between 2006 and 2011 was gathered from the following organizations: British Columbia Centre for Excellence in HIV/AIDS; Canadian Association of HIV Research (CAHR); Canadian Foundation for AIDS Research (CANFAR); Canadian Institutes of Health Research (CIHR); *Fonds de recherche du Québec – Société et culture* (FQRSC); Michael Smith Foundation for Health Research; Ontario HIV Treatment Network (OHTN); and the Social Sciences and Humanities Research Council of Canada (SSHRC). Through the literature search and discussions with the Working Group membership, some research areas were identified for which Canadian evidence could not be found. These knowledge gaps have been identified in a list of areas for further research in Chapter 5 of this report.

To gather information on the current response to HIV/AIDS among gay and other MSM, including time-limited projects, networks, coalitions, committees, strategies, and policy initiatives in place between 2006 and 2010, information-gathering templates were circulated to federal, provincial and territorial officials through the following mechanisms: Federal/Provincial/Territorial Advisory Committee on AIDS, and Agency national and regional HIV/AIDS program consultants. Responses were received from all provinces and territories. Projects funded by the Toronto Public Health AIDS Prevention Community Investment were also included in the analysis. The National Expert Working Group was also instrumental in identifying additional networks, coalitions, strategies and projects for inclusion in the report.

It is recognized that many HIV/AIDS-specific programs and services serve gay and other MSM in addition to, or as part of, other key populations. For the purposes of this report, however, only time-limited HIV/AIDS projects that explicitly focus on gay and other MSM are included. In addition, although evidence demonstrates the impact of the determinants of health on the vulnerability of gay and other MSM to HIV/AIDS, due to time and methodological constraints, Chapters 5 and 6 focus on HIV/AIDS-specific projects only.

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CHAPTER 2 – DEMOGRAPHIC PROFILE

This chapter provides an overview of available data on selected demographic characteristics of gay, bisexual, two-spirit and other men who have sex with men (MSM) in Canada. Few studies have examined the demographic characteristics of gay and other MSM outside the context of HIV/AIDS. As a result, comprehensive demographic data are not available.

As discussed in Chapter 1, categorizing gay, two-spirit, bisexual and other MSM into one collective group is problematic, since the only commonality is a descriptor of sexual behaviour. Conflating these identities under the descriptor "gay men" is also inaccurate, since this term has cultural and social meanings with which bisexual, two-spirit and other MSM do not identify. (1)

2.1 DEMOGRAPHIC DATA SOURCES AND METHODOLOGICAL ISSUES

The majority of data used in this chapter was obtained from a custom data analysis produced by Statistics Canada using information from the 2007 and 2008 cycles of the Canadian Community Health Survey (CCHS). The CCHS is an annual cross-sectional survey, which collects data on health status, health services utilization and factors related to the determinants of health. Responses from males who identified as gay and bisexual in the 2007 and 2008 CCHS were cross-tabulated against a number of demographic and socio-economic variables. The results of this cross-tabulation, which are presented here, are statistically valid; however, they should be interpreted with caution because they represent a small sample of exclusively self-identified gay and bisexual men.

This chapter also makes use of the 2006 Census of Canada, which asked respondents whether they were a member of a same-sex couple. This was the second census to include this question (the first was in 2001). Data on married and common-law same-sex partnerships, derived from the 2011 National Household Survey, are also included in this chapter.

In addition, this chapter includes relevant demographic characteristics from several other surveys of gay and other MSM, including:

- *Sex Now*, a survey of over 4,000 men in British Columbia in 2002 and 2004 (2)
- *The Ontario Men's Survey,* a survey of over 5,000 self-identified gay and bisexual men in 13 regions in Ontario in 2002 (3)
- M-Track Phase 1, an enhanced surveillance system for HIV and other STBBIs among gay, bisexual and other MSM conducted through periodic cross-sectional surveys administered at sites across Canada from 2005 to 2007 (4)

Although the findings of these studies do not reflect the total population, they do provide useful demographic information on large subgroups of gay and other MSM.

It is important to note several key differences among the data sources cited in this chapter. Both the *Sex Now* study and CCHS data analysis included men who self-identified as gay or bisexual. Any man who identified as heterosexual was excluded from both the *Sex Now* study (6) and the CCHS analysis. In contrast, the *Ontario Men's Survey* sought out men in places frequented by gay and other MSM (such as gay bars), but also included men who self-identified as heterosexual. (7) In this chapter, therefore, populations are referred to as they are defined in the specific studies or surveys from which the data derive.

There are several important challenges in interpreting the data presented here. First, any research regarding gay and other MSM requires that individuals be willing and able to self-identify as "gay" or "bisexual." Those who are able to do so represent a subset of these populations, not all MSM.

On a related point, the studies presented in this chapter rely on a set of definitions of personal identity and sexual behaviour that may overlap or reach beyond the categories primarily discussed in this report. Some studies include only men who self-identify as gay, homosexual or bisexual, while other studies include all MSM regardless of their personal sexual identities. Some men, for example, may identify as heterosexual, yet have sex with men. In an overview of population estimates of gay and lesbian

persons in the United States, Black et al., describe significant variation in responses, depending on whether the question asked related to sexual behaviour or the respondent's sexual identity as gay or lesbian. Across all samples examined, respondents were significantly more likely to report same-sex sexual behaviour than to self-identify as gay or bisexual. (5)

Furthermore, the concepts of sexual identity prevalent in mainstream Canada may not be shared by non-Western cultures. (6) Accordingly, some ethnocultural minority men from non-Western cultural backgrounds who have sex with men may not identify with the terms "gay" or "bisexual."

The stigma and discrimination experienced by this population may be another factor impeding some individuals from self-identifying as gay or reporting same-sex sexual behaviour. These factors are discussed in greater depth as determinants of health in Chapter 4.

2.2 POPULATION SIZE

A clear understanding of the impact of HIV/AIDS among gay, bisexual, two-spirit and other MSM in Canada is hindered by the lack of a reliable estimate of the size of this population. There is no nationally representative survey data on the number of gay, bisexual, two-spirit or other MSM in Canada. Therefore, the total number of gay, bisexual, two-spirit and other MSM is unknown.

A custom cross-tabulation of 2007 and 2008 CCHS data estimated that there are over 190,000 self-identified gay and bisexual males in Canada, which represents about 1% of the total male population. (7) However, surveys in different locations and contexts have produced varying estimates of the gay, lesbian and bisexual population, which suggests that this estimate may reflect underreporting.

A review of 46 international studies that estimated the size of the gay, lesbian and bisexual population suggests a median proportion of 5%, ranging from a high of 37% to a low of 0.2% of the population. (8) A 1998 stratified random sample of 750 males in Calgary aged 18 to 27 found that 15.3% of the men "reported being homosexual to some degree" on the basis of three (often overlapping) measures: voluntary, same-gender sexual contact from age 12 to 27 (reported by 14.0%); overlapping homosexual (reported by 5.9%) and/or bisexual (reported by 6.1%) self-identification (total of 11.1%); and exclusive (reported by 4.3%) and non-exclusive (reported by 4.9%) same-gender sexual relationships in the past six months (total of 9.2%). (9) Another study, the *BC Adolescent Health Survey* (a periodic survey of youth in British Columbia high schools), has consistently found that about 2% of male youth identify as gay or bisexual. (10)

2.3 PLACE OF RESIDENCE IN CANADA

Data derived from the CCHS 2007 – 2008 suggest that, like the Canadian population as a whole, the majority of self-identified gay and bisexual men reside in Quebec, Ontario and British Columbia (Figure 1).

This supports a common assumption that self-identified/out gay and bisexual men are more likely to live in (or self-identify in) the three most populous provinces with the biggest cities. Many of the major research studies on self-identified gay men and other MSM are primarily based in Toronto, Montréal and Vancouver, (2;3;11) as a result of the large population of "out" gay and bisexual men.

2.4 AGE

Data derived from the CCHS 2007 – 2008 suggest that gay and bisexual men are evenly distributed among all adult age groups (Figure 2). (7)

This finding is consistent with the socio-demographic profile of participants in Phase 1 of M-Track[4] and that of participants in other studies focused on gay men and other MSM in Canada. (2;12) The majority of M-Track respondents were between the ages of 30 and 49 (54%), with fewer between the ages of 15 and 29 (26%) or over the age of 50 (20%). The mean and median age of all M-Track participants was 39. (13) This is similar to the median age of all Canadian males in 2006 (38.6 years). (14)

[4] M-Track is the national second generation HIV surveillance system among gay, bisexual and other men who have sex with men (MSM) in Canada. Over 4,500 men participated in M-Track between 2005 and 2007 (Phase I)

[5] Calculation based on Statistics Canada summary table "population by marital status and sex by province and territory (http://www40.statcan.ca/l01/cst01/famil01d-eng.htm)

FIGURE 1: Province of residence of adult males who self-identified as gay or bisexual, Canada, 2007 – 2008

PROVINCE OF RESIDENCE OF RESPONDENT – GROUPED[a]	PROPORTION OF TOTAL GAY AND BISEXUAL MALES BY PROVINCE.	PROPORTION OF TOTAL MALES BY PROVINCE (2007)[5]
Total	100% (194,470)	100% (16,332,277)
Eastern Provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick)[a]	b	6.98% (1,141,207)
Quebec	31.8%	23.3% (3,802,072)
Ontario	33.1%	38.7% (6,315,790)
Prairie Provinces (Manitoba, Saskatchewan and Alberta)[a]	13.9%	17.4% (2,847,550)
British Columbia	14.3%	13.3% (2,172,191)
Territories	c	0.3% (53,467)

Source: CCHS 2007 – 2008 [7]

[a] Categories rolled up in order to give more reliable data

[b] Suppressed to meet the confidentiality requirements of the Statistics Act

[c] Too unreliable to be published

FIGURE 2: Age range of men who self-identified as gay or bisexual, Canada, 2007 – 2008

AGE GROUPS	GAY & BISEXUAL MEN
18 to 24	15.4%
25 to 31	16.2%
32 to 38	15.2%[a]
39 to 45	22.0%
46 to 52	17.0%
53 and over	14.0%

Source: CCHS 2007 – 2008 [7]

[a] Use with caution

2.5 ETHNOCULTURAL ORIGIN

The majority of gay, bisexual and other MSM surveyed in a variety of Canadian studies self-identify as White. (2;3;13;15)

CCHS 2007 – 2008 found that gay and bisexual men were more likely to be Canadian born (82.4%) when compared to total males (75.0%) and more likely to identify as White (86.6%) compared to total males (77.8%). Similarly, the majority of M-Track respondents most strongly identified as North American (72.4%). (13) This finding may indicate a reporting bias, such that white men may be more likely to self-identify as gay or bisexual than men from other ethnocultural groups. This will be further discussed in Chapter 4.

Due to small numbers, CCHS 2007 – 2008 did not produce reliable data on the ethnic characteristics of non-White gay and bisexual men, with the exception of 4.2% having self-identified as Aboriginal. (7) According to M-Track, 2.8% of participants most strongly identified as Aboriginal and 6% of the sample reported some Aboriginal ancestry. In Winnipeg, nearly half of M-Track participants most strongly identified as Aboriginal (49.4%). Other more commonly reported ethnicities among M-Track participants included: East and Southeast Asian (4.2%), Southern European (3.4%), Latin American (3.4%), British Isles (3.3%) and African/Caribbean (2.6%), with some variation across sentinel sites. (13)

The *Sex Now* (2006) study found the following ethnocultural composition in a sample of 2,197 gay men in Vancouver: less than 1% of the sample identified as African, Caribbean, Middle Eastern, Pacific Islander, or South Asian; 2.4% identified as Aboriginal; 3.6% identified as Latino/Hispanic; 9.5% identified as Asian; and 73.8% identified as Caucasian (7.0% identified as "other"). (2)

The *Ontario Men's Survey* (2004), which included MSM from across Ontario, included 83.9% White and 16.1% non-White men. In the Toronto sub-sample, 75.6% identified as White and 24.4% identified as non-White. (12)

This larger proportion of ethnocultural minorities represented among men who identify as gay or bisexual in Vancouver (2) and Toronto (12) is broadly consistent with the difference in total population demographics between Canada as a whole (16.2% visible minorities), and Vancouver (24.8% visible minorities) and Toronto (46.9% visible minorities). (16) These factors will be discussed in greater depth in Chapter 4.

2.6 EDUCATION AND INCOME

Educational levels for the overall male population in Canada are generally high (Table 3, right column). Data from the 2006 Census indicate that 44.8% of males from 25 to 64 years of age had completed a college or university degree. (17)

According to CCHS 2007 – 2008 data, self-identified gay and bisexual men tend to have higher levels of education than self-identified heterosexual men (Figure 3). (7) The difference between the reported educational levels of self-identified gay/bisexual men and heterosexual men is statistically significant, although the disparity is not large.

Likewise, cross-sectional studies of gay and other MSM in Canada have also found that gay men tend to have higher levels of education relative to all Canadian males between the ages of 25 and 64. (2;3;18) In addition, approximately 60% of the M-Track sample had completed a minimum of a college or university degree. (13)

It is important to note that these data reflect responses by self-identified gay and bisexual men, and as such the findings may not be reflective of all members of these populations.

Regarding income, CCHS 2007 – 2008 data showed that the income of self-identified gay and bisexual men was similar to that of self-identified heterosexual males. Of those who responded to the question, 22.1% of gay and bisexual men reported earning less than $20,000 per year, compared to 20.8% of total males. Similarly, 36.6% of gay and bisexual men reported earning less than $40,000, compared to 33.2% of total males. Of those gay and bisexual men who reported earning $40,000 or more (Figure 4), the largest proportion within that income bracket (27.2%) earned between $60,000 and $80,000 annually, while 14.2% earned $100,000 or more each year (7)

Similarly, about one third of M-Track participants reported an annual personal income of $50,000 or more, with 20% earning more than $60,000 annually. However, over 10% of men reported an annual personal income of $10,000 or less or reported no income. (13) Generally, M-Track respondents' personal income increased with age and level of education. (13)

FIGURE 4: Income range among gay, bisexual and total males earning $40,000 or more per year, Canada, 2007 – 2008

INCOME	GAY AND BISEXUAL MALES	TOTAL MALES
$40,000 to less than $50,000	22.2%	23.8%
$50,000 to less than $60,000	22.8%	19.3%
$60,000 to less than $80,000	27.2%	27.2%
$80,000 to less than $100,000	13.5%[a]	12.2%
$100,000 or more	14.2%[a]	17.5%

Source: (7)

[a] Use with caution

FIGURE 3: Adult male self-reported education level, Canada, 2007 – 2008

EDUCATION LEVEL	GAY AND BISEXUAL MALES	TOTAL MALES
Graduated from high school	95.9%	90.5%
Diploma / certificate – college / CEGEP	27.9%	25.0%
Bachelor's degree	25.4%	21.0%
University degree or certificate above Bachelor's level	14.4%	11.5%

Source: CCHS 2007 – 2008 [7]

2.7 FAMILY STATUS

The 2011 Census counted 64,575 self-identified same-sex (male or female) couple families, (both married and common-law) an increase of 42.4% from 2006. Of these, 21,015 were same-sex married couples, representing approximately 0.33% of all married couples – nearly triple the number of same-sex marriages counted in 2006. The Census counted 43,560 same-sex common-law couples, representing approximately 2.78% of all common-law couples. (23) Male same-sex couples accounted for 54.5% of all same-sex couples.

The tremendous increase in the number of same-sex marriages between 2006 and 2011 is unsurprising, given that this was the first full five-year period in which same-sex marriage was legal in Canada, following its legalization across Canada in 2005. While 16.5% of same-sex couples were married in 2006, this share nearly doubled to 32.5% in 2011.

While the distribution of same-sex couples by province and territory was similar to that of opposite-sex couples, same-sex couples were more likely to live in the largest census metropolitan areas. In 2011, 45.6% (a decrease from 50% in 2006) of all same-sex couples lived in Toronto, Montréal, and Vancouver, compared to 33.4% of opposite-sex couples.

Same-sex partners were relatively young, with 25.3% aged 15 to 34 compared to 17.5% of persons in opposite-sex relationships, and only 6.2% aged 65 and over, compared to 17.8% of persons in opposite-sex relationships.

In 2011, approximately 3.4% of men in same-sex unions had children living with them, a rate five times less than that of female same-sex couples (16.5%). (23)

FIGURE 5: Proportion of men in same-sex relationships, Canada, provinces and territories, 2011 counts

PROVINCE	NUMBER OF MALE SAME-SEX SPOUSES	PROPORTION
Canada	70,390	100%
Newfoundland and Labrador	465	0.66%
Prince Edward Island	175	0.25%
Nova Scotia	1645	2.34%
New Brunswick	1120	1.59%
Quebec	20,825	29.59%
Ontario	25,430	36.13%
Manitoba	1,385	1.97%
Saskatchewan	1,075	1.53%
Alberta	7,655	10.88%
British Columbia	10,500	14.92%
Yukon Territory[a]	40	0.06%
Northwest Territories[b]	60	0.09%
Nunavut[c]	10	0.01%

Source: (24). Data for Canada, Quebec, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia excludes census data for one or more incompletely enumerated Indian reserves or Indian settlements.

[a] Data quality index showing a global non response rate higher than or equal to 5% but lower than 10%.

[b] Data quality index showing a global non response rate higher than or equal to 5% but lower than 10%.

[c] Data quality index showing a global non response rate higher than or equal to 10% but lower than 25%.

FIGURE 6: Indicators of physical health in men who self-identified as gay, bisexual or heterosexual, Canada, 2008

	MEN		
	Gay	Bisexual	Heterosexual
Self-perceived general health	%	%	%
Excellent or very good	65.4	57.1	63.9
Good	26.0	30.9	28.5
Fair or poor	8.5	12.0[a]	7.7
Chronic conditions			
None	42.1[a]	49.6	50.5
One	28.9	25.5	27.9
Two	17.5[a]	13.6	12.6
Three or more	11.5[a]	11.3	9.0
Disability day in past two weeks (physical)	17.9[a]	11.7	13.6

[a] Significantly different from estimate for heterosexual population of same gender ($p < 0.05$)

Source: (22)

2.8 HEALTH STATUS

An analysis of the 2003 and 2005 CCHS[6] data found that men who identify as gay or bisexual reported the same level of general health as heterosexuals, but reported more chronic conditions (Figure 6). (22) It should be noted that gay and bisexual men in this sample were older than the heterosexual sample, and therefore, the extent to which age plays a role in these differences in self-reported health status is not clear.

The same study indicated that "homosexuals and bisexuals are more likely than heterosexuals to find life stressful." Men who identify as gay reported the same level of self-perceived mental health as heterosexuals, but reported more mood and anxiety disorders and more often took mental "disability days" (Figure 7). More of the men who identified as bisexual considered themselves in "fair or poor" mental health compared to gay and heterosexual men. In terms of mental health indicators, bisexual men were more similar to gay men in reporting more mood and anxiety disorders and mental "disability days" in the past two weeks than to heterosexuals. (22) These issues will be discussed in greater depth in Chapter 4.

Both gay and bisexual men reported having more unmet health needs in the past 12 months than heterosexual men. However, men who identify as gay and bisexual were more likely than heterosexual men to use a wide variety of healthcare providers both traditional and alternative (Figure 8). (22) The study examined whether gay and bisexual men consulted health practitioners as a result of a higher prevalence of health conditions, and found that when controlling for health conditions, gay and bisexual men were still more likely to consult a wide variety of healthcare professionals than heterosexual men (22)

[6] 2007 – 2008 CCHS data were used where available.

FIGURE 7: Indicators of mental health in men who self-identified as gay, bisexual or heterosexual, Canada, 2008

	MEN		
	Gay	Bisexual	Heterosexual
Self Perceived Mental Health	%	%	%
Excellent or very good	73.8	66.7[a]	75.4
Good	20.5	23.9	20.3
Fair or poor	5.7	9.4[a,b]	4.3
Type of Disorder			
Mood disorder	11.1[a]	11.4[a,b]	4.0
Anxiety disorder	8.5[a]	10.1[a,b]	3.0
Disability day in past two weeks (mental)	3.0[a,b]	5.5[a,b]	1.2

[a] Significantly different from estimate for heterosexual population of same gender ($p < 0.05$)

[b] Use with caution (Coefficient of variation 16.6% to 33.3%)

Source: (22)

FIGURE 8: Use of healthcare providers among men who self-identified as gay, bisexual or heterosexual, Canada, 2003 – 2005

	MEN		
	Gay	Bisexual	Heterosexual
Consultation in past 12 months	%	%	%
Family doctor or general practitioner	74.8[a]	72.1	69.2
Medical specialist	29.4[a]	22.8	19.0
Nurse	14.7[a]	11.1	8.4
Social worker or counsellor	6.8[a,b]	9.3[a,b]	3.5
Psychologist	7.7[a]	5.8[a,b]	2.5
Alternative care provider	20.3[a]	13.4[b]	11.0
Self-help group	3.7[a]	4.5[a,b]	2.1
No regular doctor	22.2	26.2	21.9
Unmet health care need in past 12 months	14.2[a]	17.8[a]	10.9

[a] Significantly different from estimate for heterosexual population of same gender ($p < 0.05$)

[b] Use with caution. (Coefficient of variation 16.6% to 33.3%)

Note: Missing values are excluded.

Source: (22)

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CHAPTER 3 – STATUS OF HIV/AIDS AMONG GAY, BISEXUAL, TWO-SPIRIT AND OTHER MEN WHO HAVE SEX WITH MEN

3.1 INTRODUCTION

This chapter summarizes the most recent epidemiology of HIV/AIDS among gay, bisexual, two-spirit and other men who have sex with men (MSM) in Canada. It begins with a broad picture of the epidemiology of HIV and AIDS cases attributable to the MSM exposure category in Canada compiled from routine HIV and AIDS surveillance data, findings from Phase 1 of M-Track[7] and data from the most recent national estimates of HIV in Canada. Specific data related to HIV/AIDS among MSM who use injection drugs, geographic and ethnic data related to the distribution of HIV/AIDS among MSM, and data on HIV viral strain and drug resistance are also presented. The chapter concludes with a brief discussion of HIV co-infections and other sexually transmitted and blood-borne infections (STBBIs) among MSM.

As discussed in Chapter 1, the epidemiological term MSM (men who have sex with men) is used in this chapter to denote a specific transmission route for HIV. As this chapter focuses on the epidemiology of HIV infection, MSM is the main term used for consistency with the original data sources, which examine behaviours rather than personal identity. However, the terms used in the original data sources are maintained for accuracy (e.g., M-Track is a survey of gay, bisexual and other MSM; therefore, the terminology in this chapter may change to reflect the source).

3.1.1 TYPES OF SURVEILLANCE DATA

The Public Health Agency of Canada uses the following three major types of epidemiological data to monitor HIV infections and AIDS cases in Canada: routine surveillance, enhanced surveillance (behavioural and biological survey data) and mathematical estimates. Each type of data has benefits and drawbacks. A complementary approach is therefore adopted to create a more comprehensive picture of the epidemiology of HIV/AIDS in Canada.

The Agency collects and analyzes routine surveillance data on positive HIV test reports and reported AIDS cases in Canada. Routine surveillance data are provided voluntarily to the Agency by the provinces and territories, consisting of positive HIV test reports and reported AIDS cases. Data on AIDS-related deaths are also collected. While a minimum set of data is provided for each positive HIV test report and AIDS case—usually age and sex—the amount of supplementary data provided varies, since not all jurisdictions report country of birth, race/ethnicity or exposure category.

Most positive HIV test reports and AIDS cases include one or more reported risk factors, such as sex with a male, sex with a female, injection drug use, or receipt of a blood transfusion. For the purpose of national reporting, positive HIV test reports and AIDS cases are assigned to a single identified exposure category based on the reported risk factors.

There are several limitations to routine surveillance data, including reporting delays, underreporting, missing information and undiagnosed HIV infections. As a result, routine surveillance data understate the magnitude of the HIV epidemic, and consequently, do not represent the total incidence and prevalence of HIV in Canada. Notably, national information on exposure categories of individuals who have tested positive for HIV is unavailable at the national level for Quebec, and can be incomplete for other jurisdictions. Notwithstanding these limitations, routine surveillance data provide important insights regarding the impact of HIV and AIDS on gay, bisexual, two-spirit and other men who have sex with men.

The Agency also monitors trends in HIV prevalence and associated risk behaviours in key vulnerable populations in Canada through enhanced (behavioural and biological) surveillance systems. Enhanced surveillance of HIV and

[7] M-Track is a national enhanced surveillance system of HIV and other sexually transmitted and blood-borne infections (STBBIs) among MSM in Canada.

other STBBIs combines behavioural and biological surveillance to help explain changes in the incidence and prevalence of HIV and other STBBIs in these specific populations. The objective of these enhanced HIV surveillance systems (known as the "Track" systems) is to describe changing patterns in the prevalence of HIV, as well as risk behaviour practices and testing patterns for HIV, hepatitis C (HCV) and other STBBIs in each respective population. The Agency has implemented an enhanced surveillance system focusing on injection drug users (IDU) called I-Track,[8] and another focusing on gay, bisexual and other MSM, called M-Track.[9] An enhanced surveillance system focusing on Aboriginal people in Canada, called A-Track, is currently being piloted.

M-Track was first implemented in 2005. It builds upon earlier local efforts and focuses on gay, bisexual, two-spirit and other MSM. M-Track aims to monitor trends in the occurrence of HIV, HCV and syphilis among MSM; and monitor changes in behaviours associated with the acquisition and transmission of these pathogens. (3)

Data available through routine and enhanced surveillance are supplemented with statistical modeling (i.e., estimating), which is used to estimate the number of HIV infections in Canada. The Agency estimates the prevalence and incidence of HIV using combined statistical methods approximately every three years. The Agency is also responsible for reporting Canadian estimates of national HIV incidence and prevalence to UNAIDS. (4)

Finally, the Canadian HIV Strain and Drug Resistance Surveillance Program monitors the distribution of HIV subtypes and transmitted drug resistance among persons newly diagnosed with HIV in Canada. This type of data is used to detect different HIV subtypes circulating in Canada, inform vaccine development and treatment guidelines at the population level, and contribute to our understanding of HIV transmission, pathogenesis and progression to HIV-related diseases. (5)

[8] For more information on I-Track: http://www.phac-aspc.gc.ca/i-track/index-eng.php.

[9] For more information on M-track: http://www.phac-aspc.gc.ca/aids-sida/about/mtrack-eng.php.

3.2 OVERVIEW OF THE EPIDEMIOLOGY OF HIV AND AIDS AMONG MSM IN CANADA

Gay, bisexual, two-spirit, and other men who have sex with men in Canada continue to be disproportionately affected by HIV/AIDS. This group has accounted for the majority of HIV case reports with exposure information since HIV was first reported in Canada. While much has changed since the 1980s, MSM remains the most commonly reported exposure category among new HIV diagnoses, and HIV remains a significant health concern for gay, bisexual, two-spirit and other men who have sex with men. The following section provides an overview of the most recent epidemiological data available through national surveillance systems and estimates for the MSM exposure category.

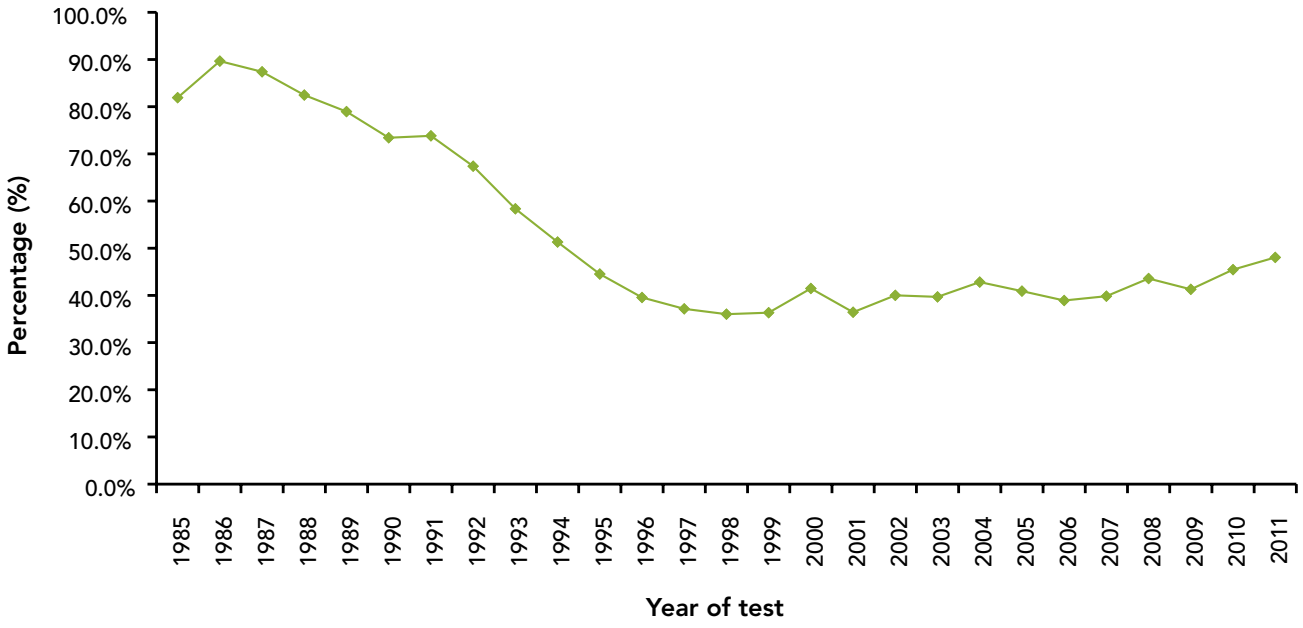
3.2.1 ROUTINE SURVEILLANCE

Through annual reports, the Agency provides an overview of the most recent epidemiological data available through national surveillance systems. It is important to note, as previously indicated, that exposure category data is incomplete in national HIV/AIDS reporting; the following information should be considered in the context of these data limitations and caution should be used when interpreting national trends over time.

Since HIV reporting began in Canada in 1985, a total of 74,162 positive HIV tests have been reported to the Agency up to December 31, 2011. Of these, 69,856 cases were among adults (≥15 years), with 37,133 (53.2%) reports including exposure category data. Among these cases, the MSM exposure category accounted for the largest proportion of positive HIV test reports in comparison to other exposure categories, with a cumulative total of 20,326 (54.7%). The MSM/IDU exposure category accounted for an additional 876 positive HIV test reports (2.4%). (6)

A significant drop in the proportion of new positive HIV tests attributed to MSM was observed between 1986 (89.7% of all HIV cases) and 1998 (36.0% of all HIV cases). An increase of 8.1% was observed between 2002 and 2011, and a ten-year high was reached in 2011 with 48.1% of positive HIV test reports among adults attributed to the MSM exposure category (see Figure 9).

FIGURE 9: Proportion of positive HIV test reports among adults (≥15 years) attributed to the MSM exposure category by year, 1985 – 2011 (n=20,326)



Source (6)

In 2011, the MSM exposure category accounted for the highest *number* of positive HIV test reports as well, accounting for 531 (48.1%) of all positive HIV tests reported among adults with known exposure category that year (see Figure 10). The MSM/IDU exposure category accounted for an additional 23 positive HIV test reports (2.1%) in 2011. (6)

As with HIV data, it is important to note that there are limitations to AIDS data available at the national level; the following information should be considered in the context of these data limitations and caution should be used when interpreting national trends over time.

From 1979 to December 31, 2011, 22,473 AIDS cases were reported to the Agency. Since 1979, among all reported adult (≥15 years) AIDS cases with known exposure category, the MSM category has accounted for the largest proportion of AIDS diagnoses, with a total of 13,616 cases or 67.2% (see Figure 11). (6) The MSM/IDU exposure category has accounted for an additional 5% (920 cases). (6)

Overall, the number of new AIDS diagnoses reported to the Agency has decreased by over 56.4% over the past 10 years. (6) In 2011, 188 new AIDS cases were reported to the Agency. An exposure category was indicated for 95 of these cases, 29 of which (30.5%) were attributed to MSM. (6)

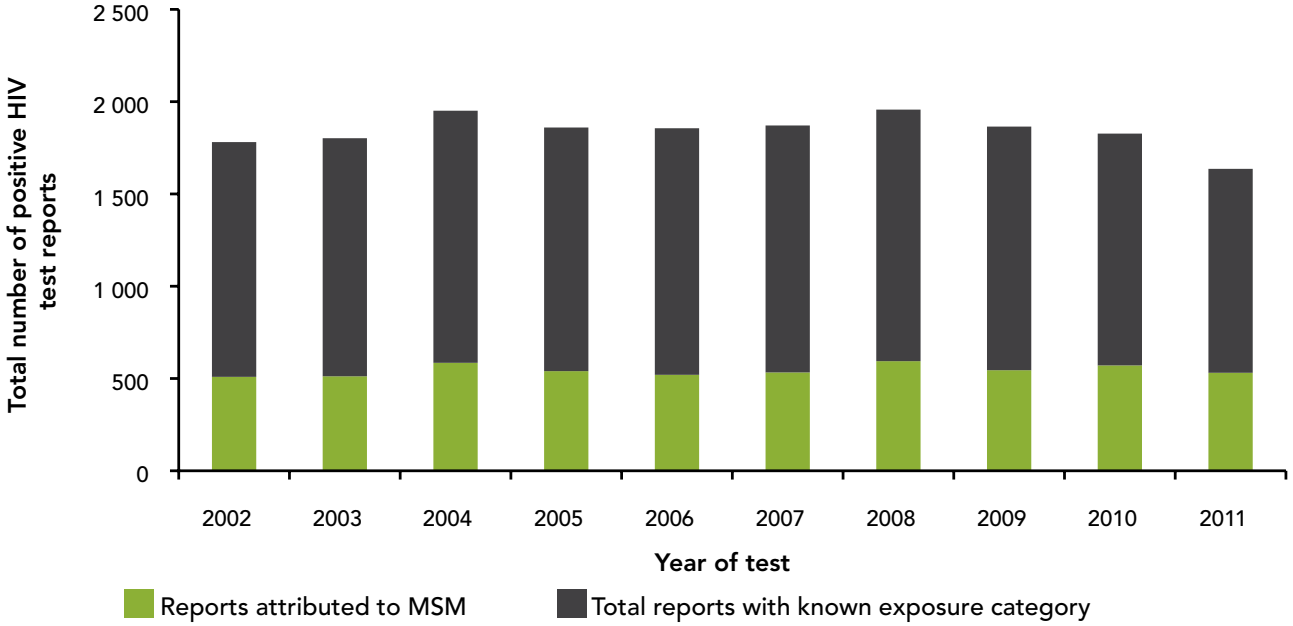
a) GEOGRAPHIC DISTRIBUTION OF THE HIV/AIDS EPIDEMIC IN CANADA: MSM

As discussed in Chapter 2, available demographic data suggest that, like the Canadian population as a whole, the majority of gay, bisexual, two-spirit and other men who have sex with men in Canada reside in Ontario, Quebec and British Columbia.

The proportion of cumulative positive HIV test reports attributed to the MSM and MSM-IDU exposure categories varies by province/territory. As mentioned previously, data on exposure categories of individuals who have tested positive for HIV is unavailable for Quebec. Among all positive HIV test reports attributed to the MSM and MSM-IDU exposure categories at the national level[10],

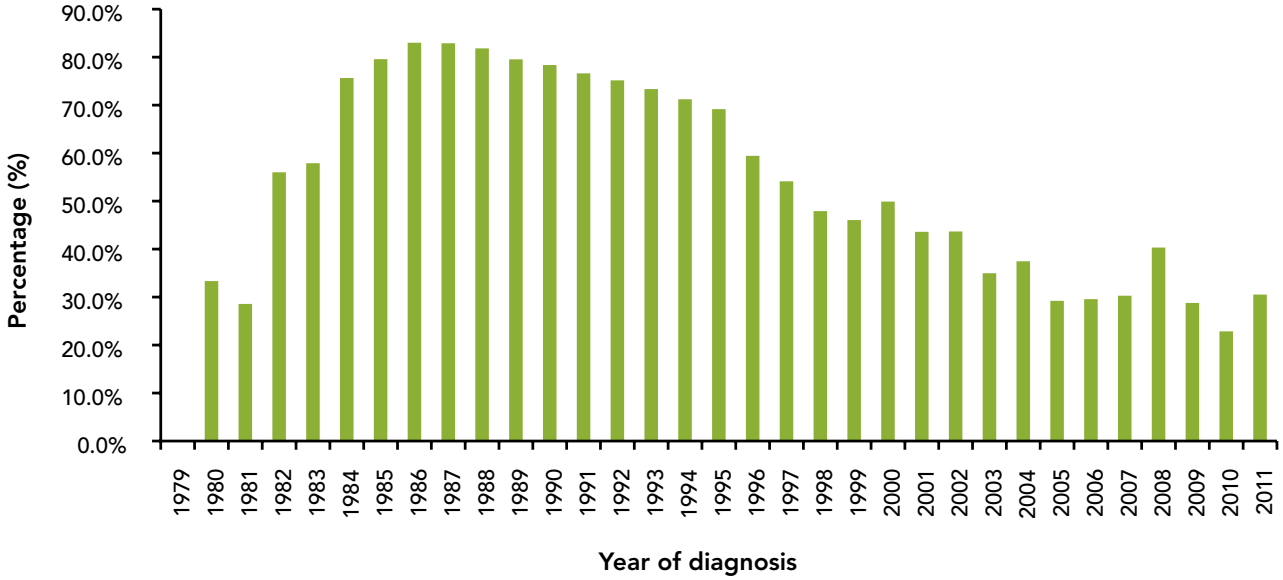
[10] Please refer to individual provincial HIV/AIDS surveillance reports for additional information about localized epidemics which may not be available at the national level.

FIGURE 10: Total number of positive HIV test reports among adults (≥15 years) with known exposure category*, MSM comparison, 2002 – 2011 (n=12,966)



Source: (6) Percentage based on total number minus reports for which exposure category was not reported or for which there was no identified risk (NIR).

FIGURE 11: Proportion (%) of reported AIDS cases among adults (≥15 years) attributed to the MSM exposure category, 1979 – 2011 (n=13,616)



Source: (6)

the majority of positive HIV tests have been reported in Ontario (MSM: 48.9%; MSM-IDU: 32.4%) and British Columbia (MSM: 31.0%; MSM-IDU: 42.4%) (see Figures 12 and 13). (6) This mirrors the location of Canada's urban centres and available demographic data regarding the distribution of gay and other men who have sex with men in Canada.

Based on provincial/territorial surveillance data, it is also possible to assess the proportion of positive HIV test reports attributed to the MSM and MSM-IDU exposure category *within* each province and territory. Localized HIV epidemics may be concentrated in different populations and driven by different risk behaviours[11]. The provinces and territories who report a majority of positive HIV test reports attributed to the MSM exposure category are Ontario (64.4%), Nova Scotia (62.1%), British Columbia (53.0%), Newfoundland (50.8%), and New Brunswick (50.5%). For the MSM-IDU exposure category, the largest proportions are found in New Brunswick (5.7%) and Yukon (5.6%). In all other provinces and territories, the proportion ranges from 0% to 4.0% (see Figure 14).

b) AGE

It is important to note the latent nature of HIV infection, which can go undetected for years. This may delay an individual's decision to get tested; as a result, the age at the time of diagnosis does not necessarily reflect the age at which HIV was contracted.

HIV surveillance data show that the number of positive test reports attributed to the MSM exposure category varies widely by age group, though tends to remain consistent year-to-year. The highest number of cases is generally reported among those in the 20 to 49 year age groups. In 2011, those aged 20-29 years (147 cases), 30 to 39 years (167 cases) and 40-49 years (141 cases) accounted for 86% of all positive HIV test reports attributed to MSM. In 2011 the highest number of positive HIV test reports in the MSM-IDU exposure category were reported for the 20 to 29 and 30 to 39 year age groups (9 cases each), followed by those aged 40 to 49 years (4 cases) (see Figure 15). (6)

FIGURE 12: National distribution of positive HIV test reports attributed to the MSM exposure category among adults (≥15 years) by province/territory, 1985 – 2011 (n=20,326)

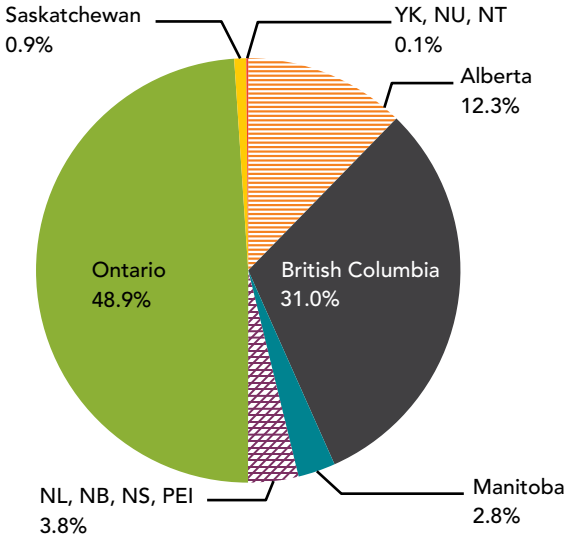
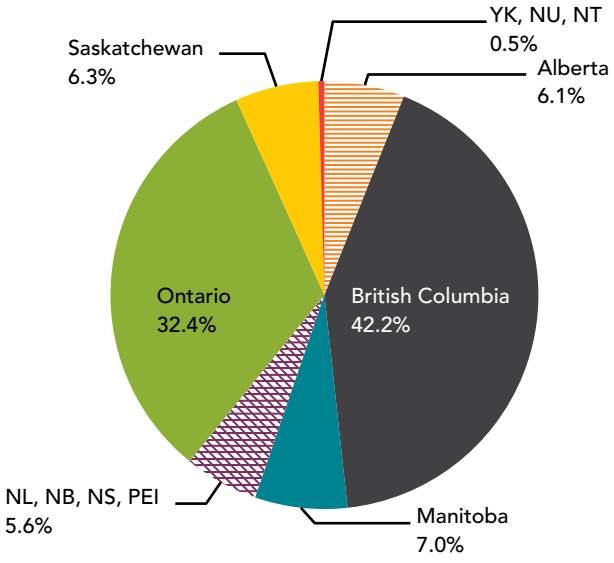


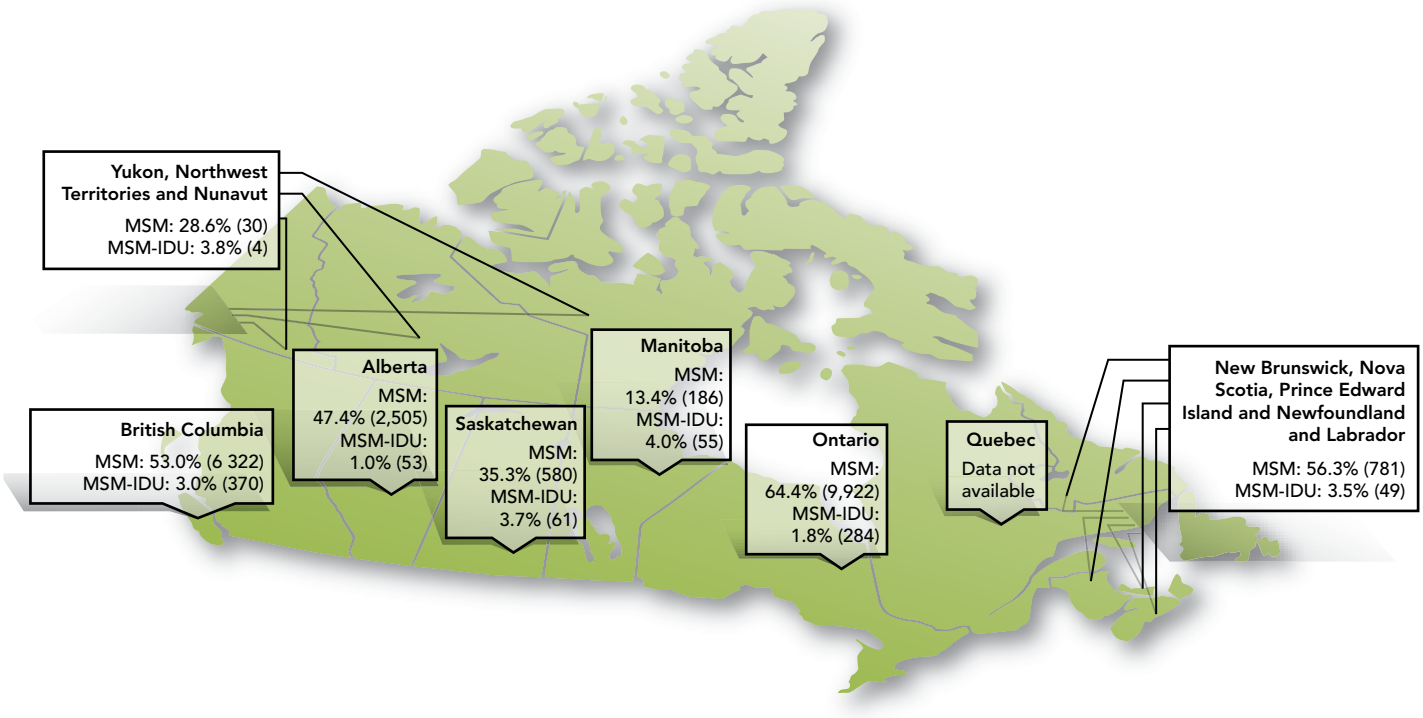
FIGURE 13: National distribution of positive HIV test reports attributed to the MSM-IDU exposure category among adults (≥15 years), by province/territory, 1985 – 2011 (n=876)



Source: (6)

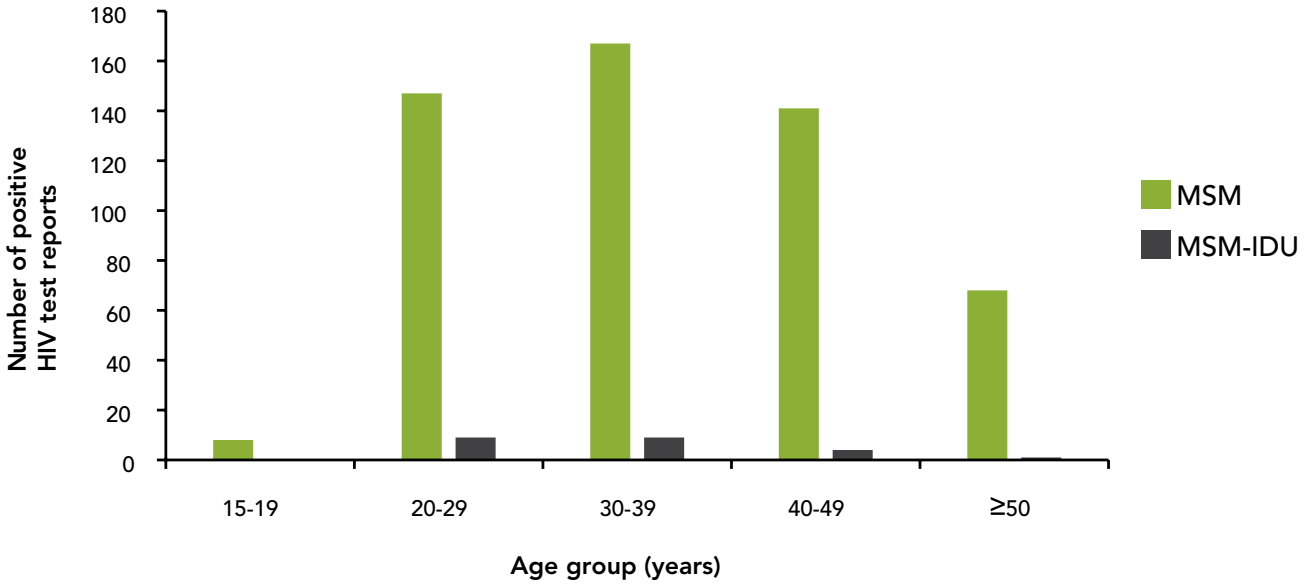
[11] Please refer to individual provincial HIV/AIDS surveillance reports (particularly for Quebec) for additional information about localized epidemics which may not be available at the national level.

FIGURE 14: Proportion and number of positive HIV test reports attributed to MSM and MSM-IDU exposure categories among adults (≥15 years) within each province/territory, 1985 – 2011



Source: (6)

FIGURE 15: Number of positive HIV test reports attributed to the MSM (n=531) and MSM-IDU (n=23) exposure categories, by age group, 2011



Source: (6)

Cumulative AIDS data from 1979 to December 2011 show that among 13,616 cases attributed to the MSM exposure category, the highest proportion were reported among those aged 30 to 44 years (8,585 or 63.1%). For the same time period, among 919 cases attributed to the MSM-IDU exposure category, the largest proportions of cases were seen among those aged 30-34 years (235 cases), 35-39 years (184 cases) and 25-29 years (181 cases) (see Figure 16).

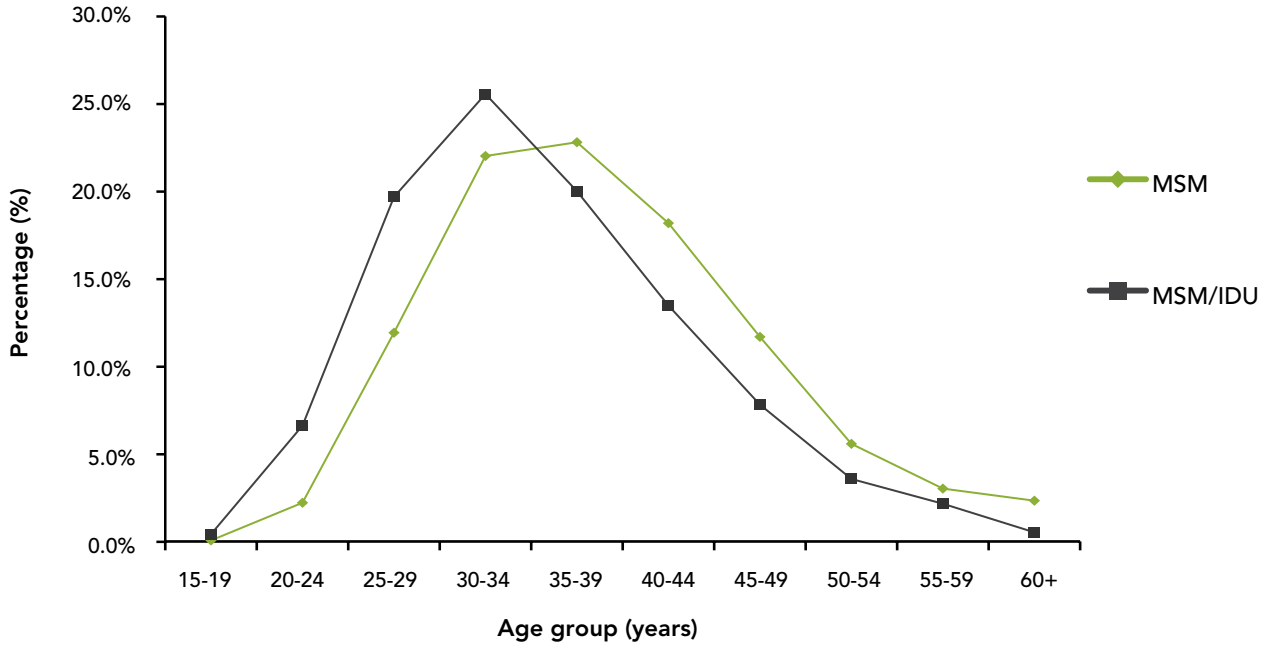
c) DISTRIBUTION OF RACE/ETHNICITY AMONG POSITIVE HIV TEST REPORTS AND REPORTED AIDS CASES

As described in Section 3.1.1, exposure category information is used in routine HIV/AIDS surveillance to monitor the routes of HIV transmission. Information collected on race and ethnicity through routine surveillance, when coupled with exposure category information, helps further describe HIV and AIDS in Canada. Collection of race and ethnicity data in Canada began in 1998, however, as with exposure category data, collection and submission of this information varies by jurisdiction[12]. Up to 2011, 81.8% of all positive HIV test reports were missing information on race and ethnicity, therefore the following information should be considered in the context of these data limitations and caution should be used when interpreting national trends over time.

Cumulatively (from January 1998 to December 2011), among positive HIV test reports attributed to the MSM exposure category, the majority (78.0%) were among people who identified as White. The remaining positive HIV test reports attributed to the MSM exposure category were among the following racial/ethnic groups: Asian (7.4%), Aboriginal (5.2%), Latin American (5.2%), South Asian/West Asian/Arab (1.8%), Black (1.6%) and Other (0.8%). (6)

Exposure category tends to vary by racial/ethnic category. Between 1998 and 2011, among all positive HIV test reports which included racial/ethnic data, the MSM exposure category was most frequently reported among Latin American (69.3%), Asian (58.4%) and White (46.5%) categories (Figure 17). The Other, White and Aboriginal racial/ethnic categories experienced the highest proportions of cases attributed to MSM-IDU, at 4.3%, 3.5% and 3.2%, respectively.

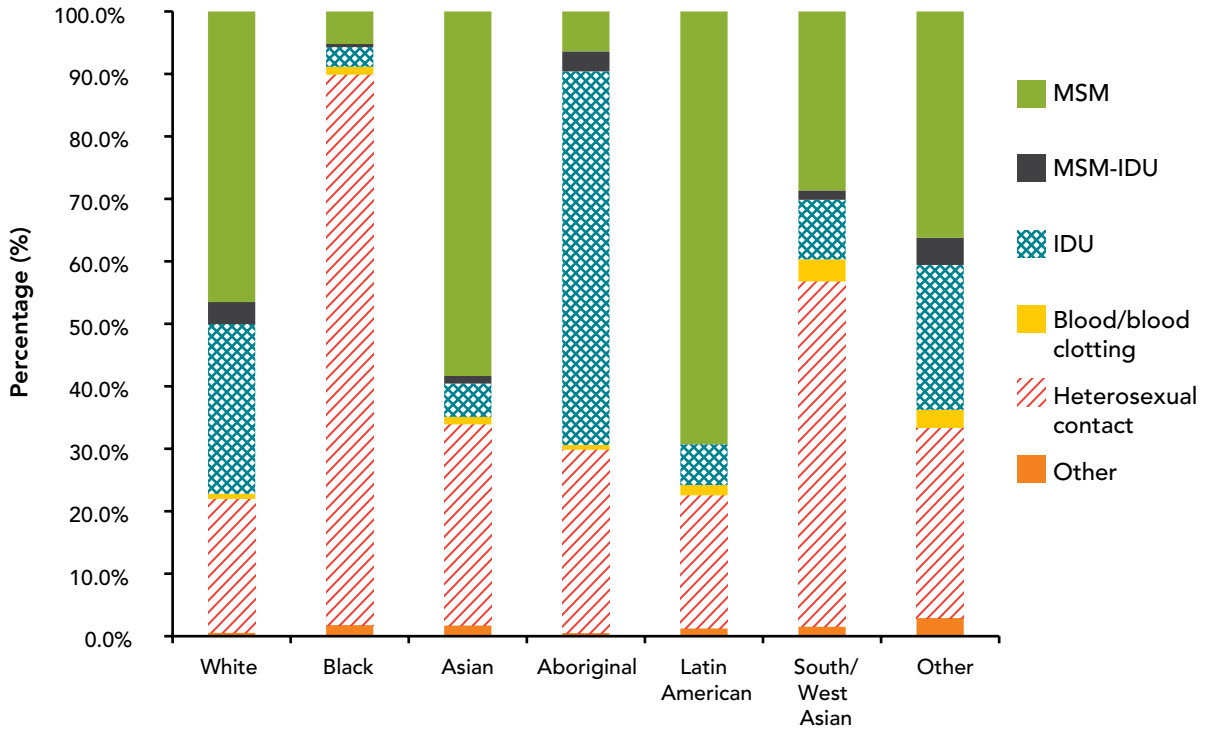
FIGURE 16: Proportion of reported AIDS cases attributed to the MSM (n=13,616) and MSM-IDU (n=919) exposure categories, by age group, 1979 – 2011



Source: (6)

[12] For more information on data limitations, please refer to Appendix 1 in the HIV and AIDS in Canada: Surveillance Report to December 31, 2011.

FIGURE 17: Proportion of positive HIV test reports among adults (≥15 years), by race/ethnicity and exposure category, 1998 – 2011 (n=10,039)



Source: (6)

Since 1979, among adult AIDS cases attributed to MSM exposure, 91.7% were identified as White. No other racial or ethnic group has accounted for more than 2.0% of MSM-related exposure. In the MSM/IDU category, Whites accounted for 88.7% of all adult cases with race/ethnicity information, while 7.2% were identified as Aboriginal.

d) TWO-SPIRIT, GAY, BISEXUAL AND OTHER ABORIGINAL MSM

From January 1998 to December 2011, 2,647 positive HIV tests have been reported among Aboriginal people, 6.4% of which have been attributed to the MSM exposure category. MSM is the third most commonly reported exposure category among Aboriginal people after injection drug use (IDU), which accounted for 59.8% of positive HIV test reports, and heterosexual contact, which accounted for 29.4%. The MSM-IDU exposure category accounted for an additional 3.2% of all positive HIV test reports attributed to Aboriginal adults during this time period. (6)

The reported AIDS case data present a similar picture. From November 1998 to December 2011, there were 503 cases of AIDS reported among Aboriginal adults. The highest proportion of cases was attributed to the IDU exposure category (58.6%). In contrast, the MSM and MSM-IDU exposure categories accounted for 10.3% and 4.8%, respectively.

3.3 ENHANCED (BIOLOGICAL AND BEHAVIOURAL) SURVEILLANCE/ POPULATION-SPECIFIC SURVEILLANCE DATA: A SNAPSHOT OF M-TRACK PHASE 1 DATA

M-Track is an enhanced surveillance system for HIV and other STBBIs among gay, bisexual and other MSM in Canada and is conducted through periodic, cross-sectional surveys administered at selected sentinel sites across the country. Participants are primarily recruited using venue-based sampling methods. M-Track participation is voluntary, anonymous, and requires informed consent. Information on demographics, sexual behaviours, drug use, HIV and other STBBI testing, and attitudes towards HIV, HCV and other STBBIs is collected via a self-administered national core questionnaire[13].

To date, six sites have participated in M-Track across Canada. Phase 1 of M-Track was first implemented in Montréal in 2005. Between 2006 and 2007, four additional sites joined M-Track: Ottawa, Toronto, Winnipeg and Victoria. The Vancouver site was the most recent location to implement M-Track, joining Phase 2, which began in 2008 and ended in 2010. Montréal also participated in Phase 2 of M-Track. Some sites opted to locally brand the M-Track survey, which included a local survey name—the survey in Ottawa and Toronto is called *Lambda*, in Montréal *Argus*, and in Vancouver, *ManCount*. The four provinces that have participated in M-Track to date account for almost 90% of all HIV-positive tests reported to the Agency since reporting began in 1985.

The following are selected data from Phase 1 of M-Track.

Over 4,500 men participated in Phase 1 of M-Track between 2005 and 2007 across the five participating city-sites: Montréal, Ottawa, Toronto, Winnipeg and Victoria. Most men who participated in M-Track reported having been tested for HIV (86%) at least once. Of men who reported that their most recent HIV test was negative, a large proportion had been tested for HIV in the two years preceding survey participation (75%). (3)

Among participants who provided a biological sample[14] of sufficient quantity for testing, and who completed a questionnaire, the prevalence of HIV was 15.1% (Figure 18). Of the men whose biological sample tested positive for HIV, 19% were unaware of their HIV-positive status. (3) In the United States, by comparison, 44% of HIV-positive MSM who participated in the National HIV Behavioral Surveillance system (NHBS) were unaware of their HIV infection. (8) The M-Track figure compares favourably with the US, and is lower than the overall estimated percentage of Canadians unaware of their HIV-positive status (26%). (9) Nonetheless, it indicates that 91 M-Track participants were unaware of their HIV-positive status.

As the M-Track surveillance system is anonymous, respondents did not receive the results of their biological tests. However, participants were encouraged to seek testing for HIV and other STBBIs via local clinics or physicians. Local contact information for healthcare providers and testing facilities was available at each site and used by research assistants to make appropriate referrals.

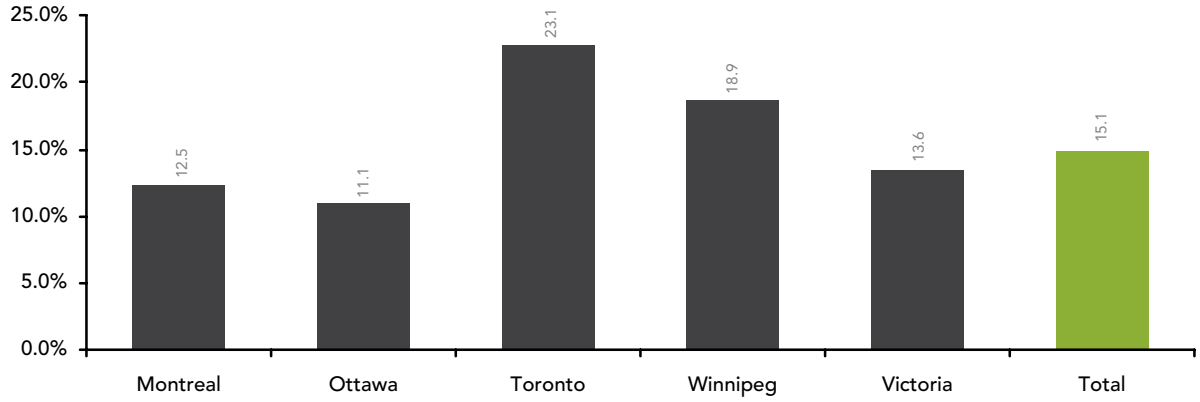
As noted above, the Track surveillance systems primarily use venue-based sampling methods to overcome some of the inherent difficulties in accessing hard-to-reach populations. As a result, the surveillance findings are not representative of *all* MSM in Canada. Underreporting of some risk behaviours may occur because of social desirability biases.

For more detailed information on Phase 1 M-Track results, please refer to the Public Health Agency of Canada's report *M-Track: Enhanced surveillance of HIV, sexually transmitted and blood-borne infections, and associated risk behaviours among men who have sex with men in Canada*. (10)

[13] Sites have the option of adding additional site-specific questions to address specific local needs.

[14] A dried blood sample (DBS) is collected from a finger-prick blood sample for HIV, HCV and syphilis testing.

FIGURE 18: Prevalence (%) of HIV among MSM who participated in Phase 1 of M-Track, 2005 – 2007 (n=3,309[a])



[a] Of 4,793 men who completed a questionnaire in Phase 1 of M-Track, 3,309 provided a dried blood sample (DBS) of sufficient quantity for HIV testing.

3.4 NATIONAL ESTIMATES OF HIV INCIDENCE AND PREVALENCE

3.4.1 NATIONAL ESTIMATES OF HIV PREVALENCE IN 2011

The most recent national estimates indicate that gay and other MSM continue to be the population most affected by HIV, with an estimated 46.7% (33,300) of all prevalent cases in 2011 attributed to the MSM exposure category. This estimated overall proportion was similar to the estimated proportion in 2008 (46.9%). 8 (91) In addition, the combined MSM-IDU exposure category was estimated to represent an additional 3% (2160) of prevalent cases in Canada in 2011, while the estimated rate for 2008 was 3.2%. (9)

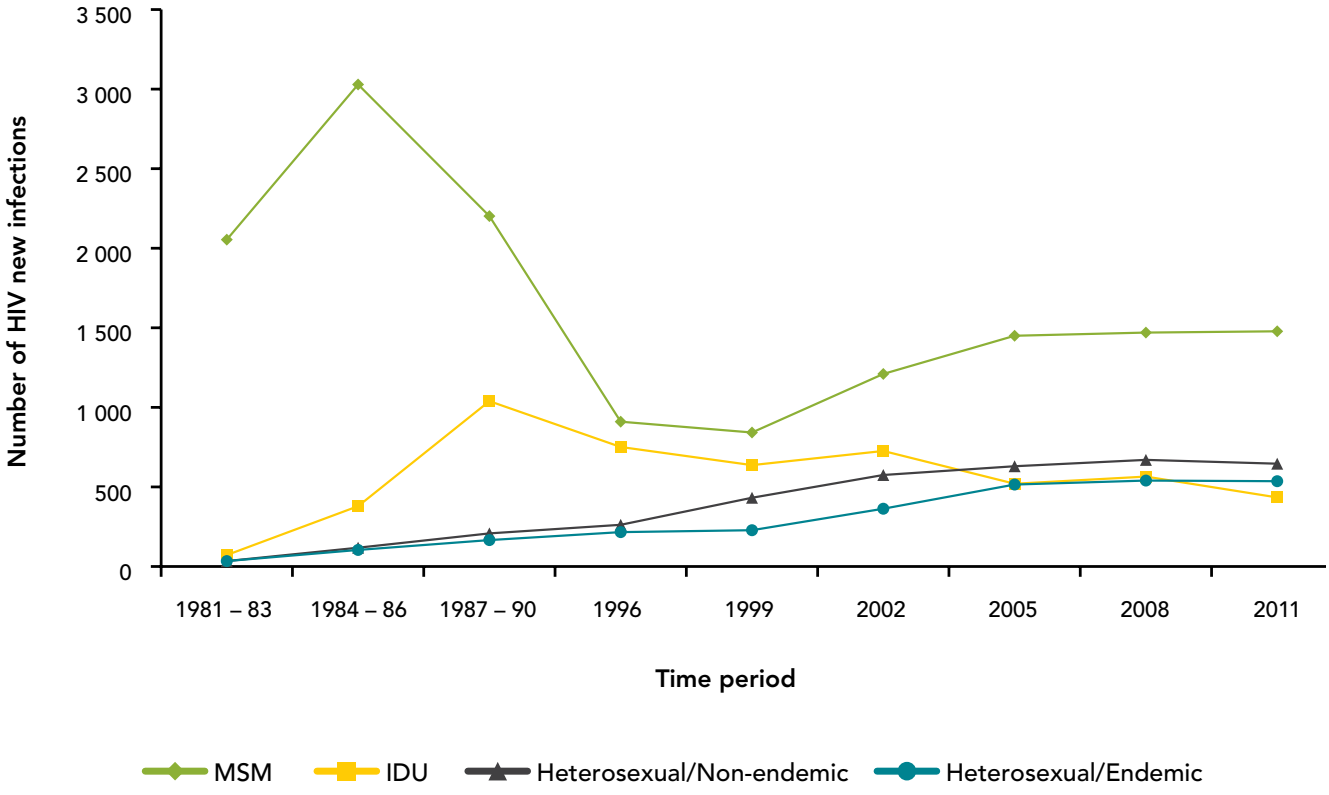
Of the estimated 71,300 people living with HIV in Canada in 2011, 25% (17,980, range of 14,500-21,500) were unaware of their HIV infection. This represents a slight decrease from 2008, when it was estimated that 26% of people living with HIV in Canada were unaware of their HIV infection. (91) However, fewer HIV-positive individuals in the MSM exposure category were estimated to be unaware of their HIV infection relative to all people living with HIV in Canada (20% in the MSM exposure category versus 25% of all persons living with HIV). This translated into an estimated 6,700 (5,100-8,300) people living with HIV in the MSM exposure category who were unaware of their HIV-positive status. (9) By comparison, a higher proportion of HIV-infected people in the IDU exposure category (24%) and in the heterosexual exposure category (34%; endemic and non-endemic combined) were estimated to be unaware of their HIV infection. (9)

3.4.2 NATIONAL ESTIMATES OF HIV INCIDENCE IN 2011

Gay and other MSM continued to account for the highest proportion of estimated new HIV infections in 2011 (46.6%, or 1,480 cases attributed to the MSM exposure category, range of 1,060-1,900). This was slightly higher than the estimated 44.1% of new infections attributed to the MSM exposure category in 2008. (91) The combined MSM-IDU exposure category represented an additional 2.5% (80 cases, range of 50-110) of new HIV infections in 2011. (9)

Over time, the estimated new HIV infections among gay and other MSM has varied greatly. In the early stages of the epidemic, the majority of new infections were attributed to the MSM exposure category. This trend reached its peak in 1984 – 1985. New infections attributed to the MSM exposure category then declined sharply until 1996, increased again between 1999 and 2005, and have essentially been stable since 2005. Figure 19 illustrates the trends in estimated numbers of new HIV infections in Canada across selected exposure categories. (11)

FIGURE 19: Estimated number of incident HIV infections per year over time period in Canada by exposure category (range of uncertainty omitted).



Source: (11)

3.5 VIRAL STRAIN AND DRUG RESISTANCE

HIV viral strain and subtype surveillance is important for understanding the distribution of HIV subtypes in Canada. This ensures that HIV tests continue to reliably detect all strains and subtypes. The surveillance data inform vaccine development, enable assessment of genetic markers of drug resistance, and inform our understanding of HIV transmission, pathogenesis and progression to AIDS.

Results from the Public Health Agency of Canada's national HIV Strain and Drug Resistance program indicate that the viral strain HIV-1 B predominates among men infected through having sex with men. Of specimens received by the HIV Strain and Drug Resistance program from 1984 to 2005, 97.7% (785 of 803) of all HIV infections attributed to the MSM exposure category were HIV-1 Subtype B. Cases attributed to MSM-IDU are also primarily infected with Subtype B, with 92.3% (84 of 91) of specimens showing this viral strain. When comparing across exposure categories, data suggest non-B subtypes of HIV-1 are more prevalent in individuals infected by heterosexual sex (including those who come from HIV-endemic countries). (5)

Antiretroviral therapies (ARVs) have led to simplified treatment regimes and reduced mortality rates from AIDS-defining illnesses for many people living with HIV/AIDS (PHAs) in Canada. There are concerns, however, that the increased and widespread use of ARVs and a growing number of treatment failures may lead to the transmission of drug-resistant strains of HIV. Overall, the prevalence of primary drug resistance in treatment-naïve HIV-positive individuals was 8.9% among specimens received by the national Strain and Drug Resistance program for the years 1996 – 2005. The prevalence of multi-drug resistant (resistant to more than two classes of ARVs) HIV was 1.4% among specimens for the same time period. (5) Specimens attributed to the MSM exposure category exhibited a primary drug resistance prevalence of 9.2% for the years 1996 – 2005, while specimens

attributed to the MSM-IDU exposure category exhibited a primary drug resistance prevalence of 8.6% during the same time period. (5)

3.6 HIV CO-INFECTIONS

HIV co-infection with pathogens such as tuberculosis and sexually transmitted and blood-borne infections (STBBIs) presents specific challenges for the health of co-infected individuals and poses additional risk of HIV transmission on a population level.

Data are limited on co-infections and trends in STBBIs other than HIV among MSM at the national level. Based on the data that are available, HIV co-infections represent a significant health burden among MSM, and evidence from other developed countries points to the common occurrence of HIV co-infection with other STIs in this population. (12-17) Data on the prevalence of STIs among MSM come from enhanced surveillance activities and targeted epidemiological studies. Co-infections involving HIV and other STIs have significant implications for disease progression, treatment and care. However, there is limited evidence in Canada on viral hepatitis and tuberculosis from surveillance systems and targeted research studies specific to MSM.

3.6.1 SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) are associated with an increased risk of acquiring and transmitting HIV. (12;18-27) Similar transmission modes and risk behaviours for HIV and STIs, as well as several biological factors related to STI infection, increase one's susceptibility to infection. (18) STIs such as gonorrhea, chlamydia, herpes simplex virus (HSV) and syphilis can cause genital lesions and inflammation, thereby increasing the risk of HIV transmission during sex. (18;25;28) STIs also elicit immune responses, causing local increases in immune cells which are targets for HIV. (18;23;25) Co-infection with HIV and another STI can also increase the risk of transmitting HIV to a sero-discordant partner. (18;23;29-32)

The relationship between HIV and other STIs extends beyond transmission risks. Co-infection with HIV and another STI can accelerate the progression of HIV and have significant effects on the disease course of the co-existing STI. (12;18;23;26;32;33) For example, an individual infected with HIV and syphilis may be at greater risk of developing neurosyphilis. (34;35) Syphilis co-infection is also associated with an increase in HIV viral load and a decrease in CD4 cell count, markers of disease progression for HIV-positive individuals. (29) HIV and other STI co-infections thus create a significant burden on affected communities, and can collectively increase the burden of each individual infection.

Although knowledge of the relationship between HIV and other STIs has evolved, further research is needed to better understand the synergistic relationship between STIs and HIV. (19;25) Other influences, such as IDU or social determinants of health (e.g., low income, overcrowded living conditions, poor access to health care) can put MSM at risk for other blood-borne infections such as hepatitis B and hepatitis C.

a) SYPHILIS

Nationally collected data on syphilis co-infection in MSM with HIV are not available. However, data collected on syphilis outbreaks across Canada have identified MSM as the primary community affected. (32;36;37) In Ontario, having a same-sex sexual partner was the most frequently reported risk factor for infectious syphilis among men, accounting for 84% of cases (532 of 630) in 2009. (38) MSM also account for over 90% of cases of infectious syphilis in Quebec. (39) In British Columbia, 66.2% of infectious syphilis cases were among MSM in 2009. (40) Over one third (37.0%) of syphilis cases in the province were among MSM living with HIV. (40)

M-Track data are also available on HIV and syphilis co-seropositivity. When describing the biological results for hepatitis C and syphilis from M-Track, the term co-seropositivity is used instead of infection because the dried blood sample (DBS) tests can only detect lifetime prevalence and cannot distinguish between past and current syphilis infections (i.e., antibodies to a past or present infection). Among Phase 1 M-Track participants who provided a biological sample of sufficient quantity for testing for both HIV and syphilis, 12% were seropositive for only HIV, 3.4% were seropositive for only syphilis, and an additional 2.9% were seropositive for both HIV and syphilis (i.e., HIV/syphilis co-seropositive). (10)

Although data identifying same-sex sexual behaviour are not available through the routine surveillance of STIs in Canada, male-to-female rate ratios can also be used as a surrogate for trends in male-to-male transmission of STIs. An increase in the male-to-female rate ratio for infectious syphilis (8:1 in 2004 compared to 1.3:1 in 1997) suggests increased transmission among MSM. (41) Two recent US-based studies have also found that MSM are at higher risk of HIV and syphilis co-infection. (42;43)

b) GONORRHEA

Canadian data on HIV/gonorrhea co-infection are not readily available. However, international studies show that rectal gonorrhea infection is associated with higher rates of HIV co-infection and seroconversion over time. (44-48) In addition, a meta-analysis of the effect of genital tract infections on HIV-1 shedding in the genital tract found evidence of increased HIV-1 shedding in HIV-positive persons co-infected with gonorrhoea or chlamydia. (49)

c) CHLAMYDIA

Canadian data on HIV-chlamydia co-infection are not readily available. However, international studies have found evidence of increased HIV viral shedding in the semen of HIV-positive individuals co-infected with chlamydia. (49-51)

d) LYMPHOGRANULOMA VENEREUM

Until recently, the STI lymphogranuloma venereum (LGV) was rare in industrialized countries. However, outbreaks in MSM communities have been observed in Europe, the US, and Canada. All Canadian cases of LGV have been among males, with the majority reporting recent sexual activity with one or more male partners. A recent systematic international review found a significant association between LGV and HIV among MSM, with a prevalence of HIV among MSM with LGV ranging from 67% to 100%. (52) In Canada in 2009, HIV co-infection was reported in 72.4% (42 out of 58) of LGV cases among males with information available on HIV infection status. (53)

e) HUMAN PAPILLOMAVIRUS

International data suggest that the prevalence of anal human papillomavirus (HPV) is significantly higher among MSM (54) with HIV-infected MSM having rates of infection upwards of 95%. (55-58) HPV has been associated with the development of anal cancer. (59-61)

In Canada, the Toronto Research for Anal Cancer Evaluation (TRACE) study of 224 HIV-positive MSM found HPV among 93% of participants. (62) Some data on HPV are also available from the Vancouver M-Track site (locally branded as *ManCount*). As a site-specific initiative, *ManCount* asked a subsample of men to participate in an additional study, unique to Vancouver, by providing an anal swab for HPV screening, as well as chlamydia, gonorrhoea and anal cancer. Of the samples that were adequate for analysis (approximately two thirds of 239 swabs), 62% were positive for HPV. (63)

3.6.2 VIRAL HEPATITIS

a) HEPATITIS A

Hepatitis A is an acute viral liver infection, transmitted person to person via the fecal/oral route, through ingesting contaminated food or water, or direct contact (including sexual contact) with an infected person. (64) The prevalence of hepatitis A among MSM has been reported to be significantly higher in European studies (64) and outbreaks have also been reported in the US and Australia. (64;65) Evidence on the impact of hepatitis A infection on HIV is mixed. Some studies suggest no impact, (64;66) while others suggest HIV infection may prolong hepatitis A infection and increase the likelihood that hepatitis A becomes symptomatic and that it may increase HIV viral load. (64;67)

b) HEPATITIS B

In most Western countries where hepatitis B prevalence is low, including Canada, hepatitis B transmission is mainly restricted to certain risk groups, such as people who use injection drugs, sex workers and MSM. In Canada, sexual transmission, especially between men, is the main route of hepatitis B infection.

Despite the availability of safe and effective vaccines, many MSM have not been adequately vaccinated against hepatitis B. From 2005 – 2010, of 262 acute hepatitis B patients in Canada who were interviewed as part of the Enhanced Hepatitis Strain Surveillance System, 9.9% (26 of 262) reported having a history of MSM activity in the six months before the onset of illness. (68) Another study indicated that approximately 21.9% of all new hepatitis B infections in Vancouver are among MSM. (69)

As a consequence of shared modes of transmission, co-infection with hepatitis B among persons living with HIV is relatively common. Among men who are infected with hepatitis B, 6%-10% are co-infected with HIV. (70) Hepatitis B progresses more quickly in HIV-positive patients. Episodes of hepatitis B activation are more frequent, cirrhosis of the liver occurs more rapidly and hepatocellular carcinoma is more frequent than in those who are only infected with hepatitis B. (71) Moreover, liver-related mortality among patients co-infected with hepatitis B and HIV is 14 times greater than that of patients infected with only one of the viruses. (70;71) Hepatitis B treatment options are also limited, and treatment outcomes are negatively influenced when a patient is co-infected with HIV. Monotherapy for both HIV and hepatitis B is inappropriate because of the high possibility of resistance. (71)

c) HEPATITIS C

Other STI co-infections with HIV also impact disease progression, treatment, management and transmission. Canadian data on hepatitis C (HCV) co-infections with HIV among MSM are currently limited.

The primary risk factor for HCV transmission is exposure to infected blood, such as through the use of contaminated equipment for IDU, which accounts for the majority of such infections nationally. (72;73)

Sexual transmission of HCV is controversial; some consider sexual transmission rare. (74;75) Others have reported evidence supporting the sexual transmission of HCV and consider it a risk for MSM. (76-80) From 2002 – 2007, of 8,389 male HCV patients in Canada who were interviewed as part of the Enhanced Hepatitis Strain Surveillance System, 707 (8%) reported having a lifetime history of MSM activity. MSM-IDU, with their potential for sexual and percutaneous (i.e., through IDU) exposure, are a specific population at risk for HCV infection, as well as co-infection with HIV due to the common transmission routes of these infections. (79)

HIV and HCV co-infection impacts the health of those affected and presents challenges for care providers. HCV co-infection with HIV is associated with higher rates of liver disease, (81;82) which is negatively correlated with CD4 counts. (83) With high rates of HIV and HCV co-infection and longer life expectancy among HIV-infected individuals, HCV has become a leading cause of morbidity and mortality among the HIV-positive population, a trend that is expected to continue as HIV treatments improve. (84-86) Care and support services for co-infected individuals are important for improving and maintaining health because of treatment-related drug interactions and toxicities. (84)

Agency data on MSM HIV-HCV co-infection are also unavailable; however, data are available on co-seropositivity.[15] Data from Phase 1 of M-Track indicate that, among men who provided biological samples of sufficient quantity for testing for both HIV and HCV, 12.9% were HIV seropositive only, 3.1% were HCV seropositive only, and an additional 2.2% were HIV/HCV co-seropositive. (10)

[15] The term co-seropositivity is used instead of co-infection because the dried blood sample (DBS) tests can only detect lifetime prevalence and cannot distinguish between past and current infections, i.e., antibodies to a past or present infection.

3.6.3 TUBERCULOSIS

There is little domestic or international data available about TB and HIV co-infection among MSM.

By 2007 only 12% of TB patients in the general population were tested for HIV among the 202 countries that report to the WHO monitoring system. (87) In Canada there has been a slow but steady increase in the number of reported TB cases for which HIV status was also reported. In 2009, the HIV status of 39% of all TB cases was reported, up from 16% in 2000. Of the cases for which HIV status was reported, 9.9% were positive; however, this does not necessarily reflect the prevalence of HIV among TB cases, as a number of other risk factors may have led to being tested for HIV. As a result, the prevalence of HIV among TB cases is estimated at between 3.9% and 9.9%, which should be interpreted with caution. (88) Enhanced TB recording and reporting for HIV-infected individuals and HIV reporting for TB-infected individuals is being encouraged.

Latent TB infection is an important HIV co-infection concern. It is estimated that one third of the general population is infected with dormant TB and that between 5% and 10% of individuals with latent infection will progress to active disease at some point in their lives. However, among those co-infected with HIV and TB, there is a 10% annual risk of progression to active TB disease. (89) As with other co-infections, treatment of HIV and TB co-infection presents challenges for healthcare providers due to the need to manage multiple treatments. (90)

3.7 CONCLUSION

Notwithstanding certain limitations regarding the collection and reporting of data, important conclusions can be drawn based on the information presented in this chapter. It is clear that, since the beginning of the epidemic, gay and other men who have sex with men have been, and continue to be, the population most affected by HIV and AIDS in Canada. This population accounts for the highest proportion of both new and prevalent infections, as well as reported AIDS cases. This fact, combined with the fact that new infections continue to occur among MSM, points to the need for a sustained and renewed approach to prevention, testing, diagnosis, care and support among gay and other men who have sex with men.

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CHAPTER 4 – CURRENT EVIDENCE ON FACTORS THAT IMPACT RESILIENCE AND VULNERABILITY TO HIV/AIDS

4.1 INTRODUCTION

A comprehensive population health approach must take into account any social and economic factors that affect the population's health. This chapter summarizes available evidence on factors that impact the vulnerability of gay, bisexual, two-spirit and other men who have sex with men in Canada to HIV infection through the lens of the determinants of health. Though most relevant research focuses on this population's vulnerability to HIV/AIDS, resilience is also examine in areas where available literature addresses it.

The following determinants of health are examined in this chapter:

- Biology and Genetic Endowment
- Gender
- Healthy Child Development
- Culture
- Social Support Networks
- Income and Social Status
- Social and Physical Environments
- Health Services
- Personal Health Practices and Coping Skills

Homophobia and heterosexism are also examined as factors that contribute to the vulnerability of gay and other MSM to HIV and AIDS. This chapter begins with a brief examination of the history of the impact of HIV on gay and other MSM, and the population's overall resilience in the face of stigma and discrimination.

As discussed in Chapter 1, the epidemiological category of men who have sex with men (MSM) encompasses a broad variety of individuals. This population is a diverse group with distinct identities and a wide range of personal circumstances, coming from all ethnocultural, socio-economic and demographic backgrounds. Moreover, some MSM identify as gay, bisexual, two-spirit or even heterosexual, while others may not identify as any of the above.

4.2 DETERMINANTS OF HEALTH

In the past, HIV prevention models have assumed that individuals will make informed decisions based on the information provided them to reduce their risk of infection. However, it is now recognized that socio-economic factors—known as the determinants of health—influence the vulnerability of individuals and populations to HIV infection. In other words, the determinants of health affect their ability to control and act on decisions to take protective measures.

The links between the determinants of health and the well-being of individuals and communities are well documented. Nonetheless, there "is very little literature... that places HIV/AIDS in this broad population health context. Instead the literature most often explores the association between a particular social determinant and behaviour that places a person at risk of HIV infection." (1)

Some international research links specific determinants of health to HIV vulnerability or resilience among gay and other MSM. Equivalent Canadian research, however, is scarce to non-existent. In light of the lack of Canadian research on the determinants of health related to HIV vulnerability or resilience, the report's methodology was altered to include studies that explore broader links between the health status of gay and other MSM and the broader determinants of health.

4.2.1 VULNERABILITY AND RESILIENCE

Most research on HIV/AIDS among gay and other MSM focuses on this population's vulnerability to infection. Herrick et al. (2011) describe resilience against HIV/AIDS among MSM as an "untapped resource" in behavioural intervention design. (2) Resilience can be understood as "the element of risk being mitigated by protective factors to produce a positive outcome or adjustment". (3) While research interest in resilience as an approach to HIV prevention for this population is growing, there is little published Canadian research on resilience against HIV/AIDS among gay men.

What research there is, however, suggests that gay and other MSM form strong and innovative relationships, communities and social support networks. Gay men also developed an early and effective community response to AIDS beginning in the 1980s. On an individual level, research suggests that many gay and other MSM use condoms consistently and correctly and negotiate safer sex. (4;5) (For more about this topic, see Section 4.1.10 Personal Health Practices and Coping Skills.)

The history of gay, lesbian, bisexual and transgender activism in Canada has had a profound impact both on the social environment in which gay and other MSM live today, and on the Canadian response to HIV/AIDS. The Stonewall riots in New York City in 1969 and the decriminalization of homosexuality in Canada the same year sparked a decade of community organizing and advocacy among gay, lesbian, bisexual and transgender people. (6)

Following the first reports from the United States in 1981 and then Canada in 1982 of a mysterious new illness affecting gay men, AIDS quickly became a health crisis among gay men, and the most significant issue in gay men's community organizing. Gay men were at the epicentre of the emerging AIDS epidemic, with 74.7% of all positive HIV tests reported in Canada from 1985 (when national data collection began) to 1994 being attributed to the MSM exposure category. (7)

When the disease first emerged, there was no effective treatment for HIV infection. The impact of the deaths of thousands of gay men from AIDS in a short period of time served as a call to action. Gay men responded to the emerging epidemic through community organizing, and played key roles in setting up the first community organizations to provide prevention, care and support services for people living with HIV and AIDS (8) in cities across Canada. (6) The AIDS epidemic mobilized gay communities in unprecedented ways, leading to the establishment of community networks, AIDS service organizations and political organizations that successfully advocated for attention and resources for HIV. This community infrastructure still exists, and in many cases has been expanded. The response to the AIDS epidemic is a sign and the resultant community infrastructure a source of community resilience against HIV.

Understanding and harnessing resiliencies at the individual, interpersonal and population levels may help to enhance HIV-prevention programs and interventions for this population.

> As individuals and as communities, gay men have demonstrated great resilience in the face of difficult times and harsh social injustices, including homophobia, heterosexism, racism, colonialism, economic injustice and discrimination on the basis of seropositivity. We have developed insightful analyses and practices, often through challenging injustices we experience by resisting them in creative and constructive ways. We have been and will continue to be actors in the pursuit of our health and wellness, including that of HIV prevention, at the individual, interpersonal, cultural and structural levels. (9)

4.2.2 HOMOPHOBIA, HETEROSEXISM, AND RELATED STIGMA AND DISCRIMINATION

> Research has indicated clearly that homophobia undermines our ability to adequately address HIV infection. Homophobia is a risk factor in HIV prevention and care. Confronting, reducing and eliminating homophobia and heterosexism are crucial in any systemic approach to HIV infection in Canada. (10)

The word *homophobia* literally means "fear of sameness" or "fear of the similar." (11) The term is widely understood to encompass the individual, social, institutional and internalized negative feelings toward lesbian, gay, bisexual, two-spirit and transgender individuals. (12) Homophobia manifests in a number of ways, each of which can have an impact on an individual's likelihood of engaging in HIV risk behaviours:

> *I like being gay now…but in high school I did so much to try to hide it…I even beat up this dude who looked like he was gay…. I realize now that all of this was done to try to hide how I felt so different.*
>
> —Twenty-one-year-old gay male (13)

Internalized homophobia occurs when homophobic prejudices and biases are integrated into an individual's belief system. (12) Internalized homophobia can occur among gay and other MSM, such that feelings of shame and fear can cause them to repress their sexuality and experience deep internal conflict. (14;15) Internalized homophobia can lead to mental health issues, such as anxiety and depression, and can increase people's propensity to engage in behaviours that increase their risk of HIV infection.

External homophobia occurs when internal homophobic feelings shape people's behaviour towards others that they perceive as different; for example, by prompting social avoidance, verbal abuse, discrimination and in some cases violence. (12) Statistics Canada reports that hate crimes motivated by actual or perceived sexual orientation are more likely to involve violence and result in physical injury than hate crimes motivated by other factors such as race and religion. (16) A 2002 Vancouver study of gay and other MSM indicated that 48% of its respondents reported that they had been "gay bashed" at some point in their lives. Those who had experienced gay bashing were twice as likely to engage in risky sexual behaviours as those who had not. (17)

Institutional homophobia refers to discriminatory practices and policies based on sexual orientation exercised by governments, businesses, religious organizations, educational institutions and other institutions. (12) Broad systematic barriers fuelled by homophobia can limit gay men's and other MSM's access to employment, education, housing, (10) and appropriate health care. (60)

Heterosexism refers to the belief—often held on a broad social or cultural level—that everyone is or should be heterosexual, and that this sexual orientation is normative or superior, while homosexuality is deviant, immoral or constitutes a danger or threat. (12) Heterosexism can manifest as opposition, discrimination and sometimes violence against sexual minorities. (12)

> *Like wouldn't it be wonderful to not be hassled when you walk down the street with your partner, hand in hand, or when you do the same things that the straight couples do, and it will be accepted?*
>
> —A gay male (10)

Homophobia and heterosexism often lead to discrimination against self-identified gay, bisexual, and two-spirit persons. It also creates a social environment in which other MSM are less likely to self-identify. Both homophobia and heterosexism have an overarching influence on all of the determinants of health of gay and other MSM discussed in this chapter, which in turn influence HIV vulnerability. The direct relationship between homophobia and an individual's risk of acquiring HIV has not been widely studied in Canadian literature. There is Canadian literature, however, which suggests that homophobia is linked to negative mental health outcomes, increased social exclusion (10;12) and decreased access to social support and health services, (12;60) all of which may increase an individual's likelihood of engaging in HIV risk behaviours. (9;12)

4.2.3 COMING OUT

> Coming out is a time of great personal turmoil in which the risk of HIV infection is heightened, due to the need to address and confront obstacles at the individual, interpersonal, cultural and structural levels. (9)

Coming out is "the process through which lesbian, gay, bisexual and transgender (LGBT) people recognize and acknowledge their non-heterosexual orientation and integrate this understanding into their personal and social lives." (20) The term is also sometimes used to describe the specific act of disclosing one's sexual orientation or gender identity. (20)

The ability to be open about one's sexual orientation has a significant impact on both mental and physical health, as well as one's ability to access relevant health information, including HIV prevention information, and appropriate health care. (21;93) Coming out is a key determinant of gay men's health that can also affect a range of other determinants of health, including income and social status, social support networks, healthy child development, employment and working conditions and health services. (9) Emerging research suggests that the ability to come out in a safe and supportive environment can have a powerful effect on the entire course of the lives of young gay and other MSM, particularly in relation to vulnerability and resilience to HIV. (21;23) For example, research on syndemics conducted by University of Pittsburgh researcher Ron Stall on a sample of over 2,000 self-identified gay men concludes that multiple

psychosocial epidemics among gay men, such as homophobic violence, substance abuse, and mental illness, interact to drive HIV risk and HIV infection rates among gay men. Stall's research also suggests that suffering homophobic victimization and violence at an early age may be a root cause of these syndemics among gay men. (22;24)

Coming out can present unique challenges for ethnic minority gay and other MSM. Psychosocial research conducted with ethnocultural minority gay and lesbian people shows that they see themselves as existing simultaneously in three rigidly defined and independent communities: their ethnic minority communities, the gay and lesbian community and society as a whole. (25) Homophobia experienced by individuals within both their ethnocultural community and homophobia experienced by them within society at large can make it challenging to self-identify as gay or bisexual and to integrate sexual and ethnic identities. (25)

4.2.4 BIOLOGY AND GENETIC ENDOWMENT

There is no known biological or genetic factor specific to gay men and other MSM that predisposes them to HIV infection.

4.2.5 GENDER

a) MALE GENDER NORMS

Although Canadian evidence is not available, research from the United States is beginning to document heterosexist assumptions in male gender norms and their impact on homophobia, heterosexism and ultimately on HIV vulnerability experienced by gay and other MSM over the course of their lives. (22) Research is needed to understand this dynamic in the Canadian context.

b) TRANSMEN WHO HAVE SEX WITH MEN

Transmen refers to female-to-male transgender persons; that is, individuals who were born biologically female but identify as male and may seek sex reassignment surgery. This section addresses HIV/AIDS vulnerability and resilience among transmen who have sex with men. PHAC's *Population-Specific HIV/AIDS Status Report: Women* includes a summary of available Canadian evidence on the vulnerability/resilience to HIV/AIDS among transwomen.

Research on HIV among transgender persons focuses primarily on transwomen, highlighting the unique risks faced by transwomen for acquiring HIV. However, little research exists on transmen and HIV risk. (26) HIV prevalence among transmen in Canada is unknown. However, several U.S. studies with small sample sizes have found that transmen have low HIV prevalence rates, especially relative to transwomen. (97;98) Moreover, a 1999 qualitative study of trans people and HIV risk in Quebec found that transmen generally did not consider themselves to be at risk for HIV. (27) However, for transmen who have sex with men, this self-perception may not be accurate, given the higher rates of HIV incidence and prevalence among gay men and other MSM in Canada. Some studies indicate that transgender persons living in particular regions in Canada, such as Montréal and Vancouver's Downtown Eastside, may have a higher prevalence of HIV infection than the general population. (28) These studies, however, generally have much higher participation rates of transwomen than transmen.

Certain groups of transgender persons have higher HIV prevalence rates than others. These groups include transgender persons who are also ethnic minorities, sex workers and people who use injection drugs. (28) A few U.S. studies with small sample sizes found that transmen were more likely to engage in risky sexual behaviour compared to transwomen. (99;100) However, it is difficult to track epidemiological data on this population since HIV test reports from female-to-male transgender persons are likely included among male data, given that transmen identify and live as men.

Further, transmen may also be at risk of HIV infection resulting from sharing intramuscular needles used to inject testosterone, as is done by many transmen due to a lack of intramuscular needles within needle exchange programs. (27) In addition, low self-esteem may prevent transmen from practising safer sex and using safer drug injection practices. (27)

> *I think it's harder to negotiate condom use when you have trouble talking about your body.*
>
> —A transman (26)

Transgender persons are highly susceptible to homophobic bullying and harassment based on perceived sexual orientation, (29) as well as transphobic bullying and harassment where their trans status is known. They are therefore at increased risk of social exclusion,

stigma and discrimination, drug use and mental health issues; all of which are risk factors for HIV infection. (30) A national study focusing on homophobia in schools in Canada found that 90% of trans youth heard transphobic comments every day or week from other students, while 23% heard such comments from teachers. Trans youth also reported high levels of harassment, including verbal (74%) and physical (25%), while a high proportion of trans students reported feeling unsafe in school (78%). (29;94)

> *How about raising awareness? So that when you walk into the doctor's office for the first time, you can say, "Hi, I am trans," and they don't get this glazed, blank look that goes "Oh yeah, I've never seen one of you before."*
>
> —Trans person (94)

In addition, transmen face certain institutional barriers to accessing health care, which may increase the risk of HIV infection. The administrative practices of the health care system and social service organizations (including an inability to identify as trans), may prevent transmen from accessing care and services, thus exacerbating risk. (27) For example, transmen may possess female genitalia and require pap tests as part of their routine health care, which are not typically offered to persons who appear male. (94) Moreover, a lack of transgender-specific knowledge on the part of medical professionals may limit transmen's quality of care, thus impeding their ability to access appropriate care and medical advice, and ultimately exacerbating HIV risk. (30)

4.2.6 HEALTHY CHILD DEVELOPMENT

International research has demonstrated an association between experiences of homophobic victimization in adolescence and higher incidences of mental health issues among gay, lesbian and bisexual youth, such as depression, anxiety, post-traumatic stress and suicide. (31-33) International research has also found an association between homophobic stigma and/or victimization of gay, lesbian and bisexual youth and health risk behaviours, including substance use, suicide and sexual risk behaviours, (34;35) which can put them at increased risk of HIV infection. Equivalent Canadian research linking experiences of homophobia directly to HIV risk behaviours is not available. However, results from two Canadian studies suggest that gay and other sexually diverse youth are more likely than their heterosexual peers to experience harassment and victimization. (29;36)

As identified in Section 4.1.1, emerging research suggests that the ability to come out in a safe and supportive environment can have a powerful effect on the life course of young gay men and other MSM, particularly in relation to vulnerability and resilience to HIV. (21;23) Homophobia present in communities, schools and within the family unit compounded with the overall pressures of adolescence can gravely impact the coming out process of gay and bisexual youth. (10)

Findings of a 2008 national study of over 1,700 students in Canadian schools suggest that homophobic harassment in this environment persists. Over half (57.3%) of gay, lesbian and bisexual students surveyed reported having been verbally harassed about their sexual orientation, and 24.7% reported having been physically harassed about their sexual orientation. (29) Approximately three quarters (76.7%) of all survey participants reported that they had heard derogatory comments used daily in school, such as "that's so gay," while 49.4% heard specific homophobic slurs such as "faggot" and "dyke" daily. (29)

Results from the *BC Adolescent Health Survey* are similar: gay and bisexual males were more likely to experience discrimination than their heterosexual peers. Discrimination based on sexual orientation was reported in 2003 by 60% of gay males and 36% of bisexual males—an increase from 1998. (36) Gay and bisexual males also reported significantly higher rates of victimization in school, such as purposeful exclusion, verbal harassment and physical assault. (36)

> *It was so hard to find people you can identify with…[sigh]. You did not know who to trust, I mean you really could not mess with the high school boys cause if they got mad then everybody knew your business…I could not have that happen so I maintained and did what I did on the low and outside of school. School was about school ,that's it, which probably was a good thing.*
>
> —A 21 year old gay male (37)

a) CHILDHOOD ABUSE

There are few studies that examine the frequency and implications of sexual violence among gay and other MSM. (96) There is, however, evidence that supports an association between childhood sexual violence and HIV risk behaviours. (24;95;96) One study conducted in British Columbia, which used data from the Vanguard Project and the *Vancouver Injection Drug Users Cohort* (VIDUS),

found that MSM have a higher occurrence of sexual violence in their lifetimes (28% among Vanguard men), versus other men who use injection drugs (15%). (96) The occurrence of sexual violence among MSM-IDU was highest (54%). (96) In addition, the onset of sexual violence in childhood was strongly associated with involvement in the sex trade, which can also increase the risk of HIV infection. (96)

Other studies report that men who were sexually abused as children report higher rates of unprotected anal sex with casual partners (a risk factor for HIV infection) than men who did not experience sexual abuse. (89) Childhood abuse is also linked to other HIV risk behaviours, such as drug use, having multiple sexual partners, sex work and sexual risk taking. Interviews with gay and bisexual men in Quebec who were victims of childhood sexual abuse, reveal that mental health issues and sexual and relationship difficulties are common and further complicate the ability to negotiate safer sex. (38) Moreover, higher rates of childhood abuse are reported among HIV-positive men than HIV-negative men, (96;89) suggesting an increased vulnerability to infection among those who experienced such abuse as children.

Domestic violence among men in same-sex relationships is studied less often than abuse within heterosexual relationships. However, same-sex domestic abuse does exist and international research suggests that, like domestic abuse in heterosexual relationships, it may have an impact on vulnerability to HIV. Two U.S. studies suggest that men who experienced childhood sexual abuse are more likely to be in abusive relationships as adults, and that men who engage in unprotected anal intercourse are more likely to experience domestic abuse than men who do not. (89;23) It should be noted that estimates of abuse among same-sex male couples are likely underestimates as a result of "an unwillingness to report sexual activity of any nature with another man, or because the psychological effects of sexual violence could cause participants to not acknowledge their own experiences." (96)

In sum, childhood abuse negatively affects the ability of men to engage in HIV prevention behaviours, such as practising safer sex.

4.2.7 CULTURE

a) RACIALIZED AND ETHNOCULTURAL MINORITY GROUPS OF MSM

> Racism, as a system of domination and oppression, works in the same way as sexism and homophobia. In fact, these systems of oppression are interlocking—they do not operate in a vacuum or separately—they are interwoven and their intersections serve to worsen the situation of those who cannot be neatly categorized into any one group. (101)

Ethnocultural minorities and racialized groups tend to be doubly burdened by racial stereotyping from both outside and within the gay community. (102) There is a tendency for men from marginalized sub-groups to be less likely to be "out" and to participate in gay-identified social venues, reducing both social capital-related health benefits and exposure to prevention messaging. (103) Little epidemiological data disaggregated by ethnicity or race exist, because of inconsistent reporting of ethnic identifiers linked to newly identified HIV infections, and because "research normally groups MSM, particularly Caucasians, as a homogenous unit, [thus] failing to locate individuals by cultural identity and place of birth [which] may result in confounded outcomes." (103) The lack of Canadian research in this area highlights the need to address specific sub-communities in research, prevention and programming. (104;105;60)

Youth who are recent Canadian immigrants may be particularly at risk of HIV. Ryerson University's *Youth Migration Project* in Toronto outlines some of the following links to HIV vulnerability:

- Rejection, or fear of rejection by their families and communities;
- Isolation from their cultural communities;
- Belief that their own families are more "backward" than mainstream Canadian families;
- Transphobia, within queer communities and beyond;
- A lack of culturally-appropriate and language-specific sexuality and HIV programs and resources; and
- Barriers to access to services. (39)

Studies of East and South Asian MSM indicate that social and cultural barriers faced by Asian MSM cause alienation from the community, hinder a positive self-image, and

adversely affect sexual health. (40) This is a result of experiencing racism from within the gay community, and homophobia within their specific ethnic communities, as well as the general public. Cultural taboos regarding sexuality and a lack of health and social support services tailored to specific ethnocultural needs are also significant barriers. (40;106;107)

> *Being homosexual you're at the bottom of the barrel. You add AIDS to that, you're underneath the damn barrel... And then you're just totally shunned.*
>
> —HIV-positive Trinidadian man (41)

Gay, bisexual, two-spirit and other Aboriginal MSM also face homophobia and racism, particularly in the context of the lingering effects of colonization, as well as a result of multiple forms of oppression:

> Today's Two-Spirited people face incredible obstacles. They are of two worlds, the world of differently-gendered, and the world of being Native. In essence, they are subject to multiple oppressions. As part of a minority based on gender or sexuality differences, they are oppressed and influenced by the surrounding dominant culture....Taking this into consideration, sound identity formation is an upward struggle. (42)

Available research, which examined the social conditions of two-spirit Aboriginal people in Canada, found that this population experiences "high unemployment, poverty, poor housing, homelessness, homophobia, racism, HIV/AIDS discrimination, and ostracism by the Aboriginal community." (18) As a result, this population is more prone to mental health disorders, such as depression and anxiety, which may lead to risky sexual behaviour. In addition, homophobic discrimination may also prevent two-spirit people from accessing necessary sexual health services, thus increasing their risk of acquiring HIV. (18)

> *My reserve chief and council are 'blind' to the fact that two-spirit exist. They shun you when they know you are GLBT. They need facilitators to inform them.*
>
> —Two-spirit male (18)

4.2.8 SOCIAL SUPPORT NETWORKS

> Family, friends and a feeling of belonging to a community give people the sense of being a part of something larger thanthemselves. Satisfaction with self and community, problem-solving capabilities and the ability to manage life situations can contribute to better health overall. The extent to which people participate in their community and feel that they belong can positively influence their long-term physical and mental health. (43)

Social support networks such as family, friends and communities greatly impact an individual's sense of self and belonging. For some gay men, the coming out process and life afterwards can be heavily enriched by a strong social support system. However, gay men may also face social exclusion from family and friends, and may have created their own networks for support in response. (45)

Many gay and bisexual men have formed "chosen families" in addition to, or as a result of being alienated from their biological families. Chosen families are typically composed of friends and former lovers (with whom there may not necessarily be a current sexual relationship), who offer a familial type of support. (44) While gay men's sexual behaviours are relatively well-understood, the ways in which gay and other MSM form and sustain supportive relationships with families, romantic partners, and their broader communities, and the impact of these social support networks on vulnerability to, and resilience against, HIV require further study.

a) RELATIONSHIPS

Romantic relationships can be a source of social support for gay men, increasing health and well-being, while "lack of social supports or isolation is conversely considered a 'disease determinant.'" (45) For HIV-positive gay men, romantic relationships can be a source of social and emotional support in coping with HIV infection. (46)

The 2004 *Sex Now Survey*, conducted in British Columbia, provides some detail on gay and bisexual men's romantic relationships. In terms of longevity, about one third of relationships last less than one year (32.3%); one third last between one and five years (30.3%) and a little more than one third last more than five years (37.4%). In addition, a higher proportion of men over the age of 30 are in a partnership arrangement (56.6%) than younger men (45.3%). Similarly, a higher proportion of single men are in a lower income bracket (71.3%) when compared with partnered men (58.2%). (47)

Having multiple partners and engaging in unprotected sex are risk factors for HIV infection. It has been suggested that "gay men can potentially benefit from increased support in managing sexual pluralism—planned or unplanned—within couples negotiating unprotected anal intercourse" (9) as a strategy to reduce the risk of HIV infection. The majority (73%) of partnered gay and bisexual men interviewed for the 2006 *Sex Now Survey* reported having an explicit agreement with their partners regarding activity outside the relationship. One quarter (25%) said they had a monogamy agreement with their partner. Of those who had some kind of partnership agreement, 27% said that they had broken this agreement. (48)

Regarding social support, approximately 70% of *M-Track* respondents reported that emotional and social support were available to them most of the time, with a slightly lower percentage of respondents reporting support for daily chores if needed. (4)

[My parents] actually came to me and go…at least bi, you can have kids, right.…the first thing they assumed was oh...now you're gay, you can't have a normal life, you can't have an education. And, they just automatically threw everything down the drain.

—Asian Male (102)

Data provided in Figure 20 suggest that gay and bisexual men on average experience less social support on a consistent basis than the overall male population.[16] (49) Self-identified gay and bisexual men who participated in the 2007 – 2008 *Canadian Community Health Survey* (CCHS) reported statistically significant lower levels of various forms of social support, such as having someone to listen to them and having someone who shows love and affection, than the total male population.[17] This is consistent with findings of the *Sex Now Atlantic Region 2006 Survey*, which also noted lower levels of social support for gay and other MSM when compared with results for all men from the 2005 CCHS. (50)

FIGURE 20: Gay/bisexual males by selected variables, Ontario, Alberta, British Columbia and Northwest Territories, 2007 – 2008

	GAY/BISEXUAL MALES WHO AGREED "ALL THE TIME"	TOTAL MALES[a] WHO AGREED "ALL THE TIME"
Has someone to listen	62%	68%
Has someone to provide/give advice about a crisis	59%	64%
Has someone who shows love and affection	67%	76%
Has someone to have a good time with	65%	72%
Has someone to give info to help understand a situation	54%	63%
Has someone to confide in	62%	67%
Has someone to get together with for relaxation	56%	67%
Has someone to give advice	47%	59%
Has someone to do things to get mind off things	51%	61%
Has someone to share most private worries and fears with	54%	64%
Has someone to turn to for suggestions for personal problems	55%	63%
Has someone to do something enjoyable with	61%	67%
Has someone who understands problems	50%	62%

Source: Statistics Canada, *Canadian Community Health Survey*, 2007/2008 (49)

[a] P= 0.000. P-value shows the statistical significance of the difference between estimates ($p < 0.05$). A value of +1 means the difference observed is significantly higher, -1 means the difference is significantly lower and 0 means the difference is not statistically significant.

[16] Data based on response for "all of the time." Each variable listed in Figure 19 had a range of possible responses including: none of the time; a little of the time; most of the time, and all of the time.

[17] Figure 19 provides estimates of social support based on a cross-reference of social support specific variables with the total gay/bisexual males and total male population (including gay/bisexual males) of select jurisdictions from Statistics Canada's CCHS. This set of variables is based on an optional response category and therefore the data do not represent Canada as a whole.

While it is established in the literature that a lack of social support and alienation from family and community can result in negative health outcomes, further research is needed to understand the specific implications of these data on HIV vulnerability for gay and other MSM. (9;43)

b) INTERNET

The rise of the Internet in the last two decades has permanently changed the scope of social support networks. Traditional social support systems were once limited to one's immediate physical environment. Now instant connections with others all over the world are possible. The expansion of social networks has led to many gains for gay men and other MSM, as well as some potential risks. (51)

The Internet is potentially a useful way to deliver information regarding safer sex and the transmission and prevention of HIV and sexually transmitted infections among MSM.(109) However, the research available focuses primarily on the Internet as means for soliciting anonymous, casual or long-term sexual partners, and the associated risks for HIV and other STIs.

Some studies indicate that using the Internet to find sex partners may increase other high-risk behaviours such as multiple sex partners and sex with serodiscordant partners and therefore increase vulnerability to HIV. (108;5)

A 2006 literature review examined research related to the Internet as a sex-seeking tool for MSM. The review suggests that most research is quantitative with few qualitative studies available. It refers to a meta-analysis, which indicated that around 40% of MSM have looked for sexual partners online and approximately 30% have had a sexual encounter with someone they met online. (109) PHAC's M-Track data offer a consistent finding: 39% of men who participated revealed that they looked for sex on the Internet in the previous six months with 57% of those men revealing they did so on a regular basis (more than once a month). (4)

The meta-analysis mentioned above suggests "a higher prevalence of unprotected anal intercourse (especially with serodiscordant partners) was found among MSM who sought sex online than those who did not." (109) Yet other studies suggest that there is no difference with respect to unprotected anal intercourse (UAI) in men who use the Internet and those who do not. (109)

One study, which recruited 2,262 men from Canada and the U.S. who had had sex with someone they met online at least once, sought to determine whether the behaviours of these men had changed since they started using the Internet to find sex. Sixty percent of the men indicated that their behaviour had changed: 51% reported an increase in the number of sexual partners, 41% oral sex, 30% anal sex and 26% increased the use of condoms during anal sex. (52)

A few open-ended questions in the above study revealed that some men had experienced other types of changes through the Internet, such as finding men with similar interests, feeling more comfortable being out as gay, and having safer sex. (52) Similarly, other studies suggest that Internet use has helped gay men combat social isolation caused by living in rural areas or due to discomfort with going to gay bars and other gay-identified establishments. Chat rooms were seen as a preferred avenue to communicate with other gay men and also as places to seek out sexual health information. (109)

4.2.9 INCOME AND SOCIAL STATUS

> Income and social status are key determinants of health for LGBT people, as their educational achievement and career opportunities can be affected by the prejudice and phobic reactions they experience at school, in the workplace, or elsewhere. (53)

As discussed in Chapter 2, demographic data regarding gay and other MSM are limited, including information on income and social status. According to one 2008 study, Canadian gay men have personal incomes that are 12% lower than their heterosexual peers, (54) while data available from the *Canadian Community Health Survey* suggest that gay and bisexual men tend to have incomes similar to those of other men. (49)

People with low incomes or living in poverty are more likely than those with higher incomes to be at risk for HIV infection, to have HIV, to progress from HIV to AIDS and to succumb to AIDS more quickly. (1) One report notes that "people living with HIV in Canada, most of whom are gay men, are frequently reduced to poverty or to great financial hardship." (9) For example, a study of 5,100 self-identified gay and bisexual men living in Vancouver estimated that those who were HIV-positive (16%) were more likely to earn less than $20,000 per year and not to be employed full-time. (19) For more information on income as a social determinant of health for people living with HIV, please see the *Population-Specific HIV/AIDS Status Report: People Living with HIV/AIDS.*

Social status and hierarchies can also influence an individual's sense of desirability to others. Gay men who feel disadvantaged by their age, ethnicity, income or physical appearance may feel compelled to make trade-offs during sex where condoms are forsaken, if they are considered an impediment to fulfilling the sexual encounter, thus increasing their vulnerability to HIV. (89;102)

4.2.10 SOCIAL AND PHYSICAL ENVIRONMENTS

> Homophobia and heterosexism have historically contributed to the development of physical spaces for, and by, gay men and men who have sex with men, including public spaces that afford relative anonymity and privacy in sexual relations (including parks, public washrooms, and so on). (9)

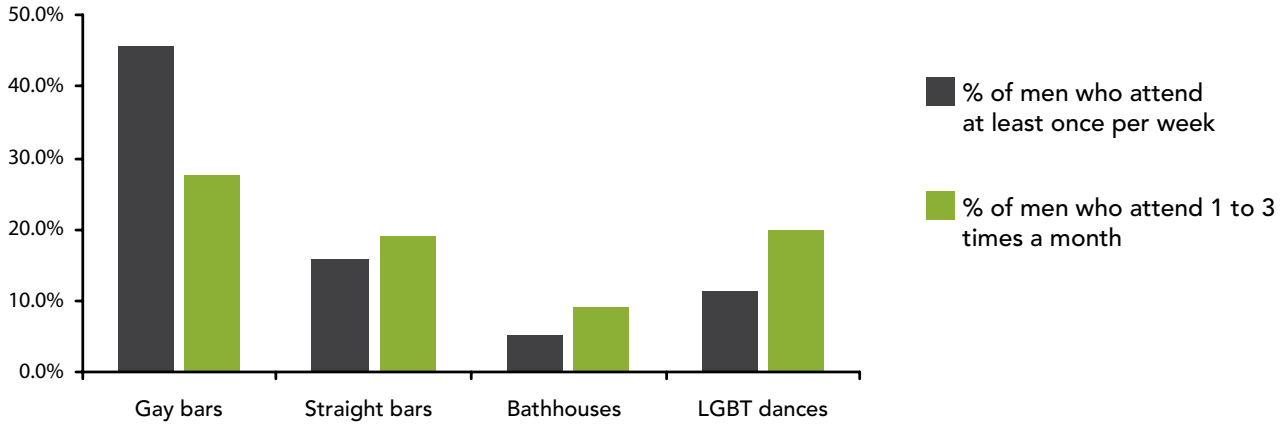
As described in Chapter 2, gay and other MSM live in a social context shaped by homophobia. This has an important effect on the social and physical environments inhabited by these populations. Conversely, supportive social and physical environments created by, and for, gay and other MSM can be "safer spaces" that allow for socialization without the threat of homophobia or violence. (9) There are numerous social venues, which are attended by gay and other MSM. Although the volume of research may not reflect the actual proportion of gay and other MSM who frequent this type of establishment, bathhouses are the subject of a substantial body of research as locations that can be associated with sexual risk behaviours. Further research is required to better understand the impact of a broad range of social and physical environments on vulnerability and resilience to HIV among gay and other MSM.

The 2006 *Sex Now Survey* reveals some common community activities of gay and bisexual men. The majority (65.0%) of participants indicated that they spent half or more of their free time with other gay men. In addition, 62.0% indicated that they are active in sporting activities, and 51.0% indicated a high level of engagement in social groups, volunteering or otherwise participating in social activities in the gay community. (47) This suggests the existence of gay-positive social networks. The 2004 *Ontario Men's Survey* identified several popular social venues (Figure 21) including gay bars and, to a lesser degree, LGBT dances, straight bars and bathhouses. (55)

It is important to note, however, that high levels of engagement in gay-specific activities may be particular to those men who are "out" as gay or bisexual, and that the methodology of venue-based sampling may have artificially inflated such findings, relative to those who self-identify as other than gay men (i.e., bisexual or another category of MSM).

As detailed in Figure 22, the *Ontario Men's Study* indicated venues, including virtual spaces, where men sought out one another for sexual purposes. Men have

FIGURE 21: Socializing in the gay community: frequency of participation in various social events, Ontario, 2004



Source: (55)

most commonly visited gay bars in the last 12 months to look for sex (60.3%). The Internet (35.3%) and bathhouses (31.4%) are also highly frequented settings where men look for sex with men in Ontario.

FIGURE 22: Socializing within the gay community: where men look for sex with men, Ontario, 2004

Looked for sex with men in past 12 months at:	MEN WHO HAVE SEX WITH MEN % N = 5,029
Gay bar	60.3
Internet	35.3
Bathhouse	31.4
Introduction from friends	24.2
House party	20.7
Gay dance party	20.3
Park or cruising area	15.9
Straight bar	12.5
Telephone chat lines	12.0
Personal ads	10.7
Sources used by less than 10%: Public washroom, shopping mall, bookshop/video club	

Source: (55)

a) BATHHOUSES

Gay bathhouses were some of the first gay social spaces, beginning in the late nineteenth century, in a context of the criminalization of gay sex and the stigmatization of those who engaged in it. In the mid-twentieth century, the first exclusively gay bathhouses opened, specifically designed to cater to the social and sexual needs of gay men. Bathhouses served as a private refuge from society's prejudices against homosexuality, and a relatively safe space in which to meet like-minded men for companionship and sex. As social spaces, bathhouses played an important role in the development of a modern gay identity among men who were sexually and romantically attracted to other men. Later on, they served as triggers for community activism, as gay men organized against police raids in the 1970s and early 1980s. (56)

Today, bathhouses are usually commercial spaces designed to enable sexual and social encounters among men. (57;110) A study that examined bathhouses in North America found that most bathhouses in Canada are located in Canada's three largest urban centres: Toronto, Montréal and Vancouver. (58)

Most existing research on the impact of social and physical environments on HIV vulnerability and resilience among gay men and other MSM focuses on bathhouses in urban areas and concentrates on levels of HIV knowledge, user characteristics and sexual behaviours. (57) Though research to date is inconclusive as to whether bathhouses are more likely sites than others for HIV sexual risk behaviours, one model suggests that relative anonymity, reports of alcohol and drug use, and the social practice of largely non-verbal communication may constitute barriers to practising safer sex, despite high levels of preventive knowledge and the availability of safer sex equipment. (57)

Unlike the United States, Canada did not experience many bathhouse closures as a result of the emergence of AIDS in the 1980s. (58) Following the emergence of HIV, consultations were held in several cities between public health officials and representatives of gay communities in an attempt to strike a balance between public health's mandate to prevent the spread of disease and the community's ability to protect its members using peer-based strategies. (57) As known sexual and social spaces for gay and other MSM, bathhouses in Canada were and continue to be targeted by HIV risk reduction services. In cities across Canada, AIDS service organizations (ASOs) and municipal public health authorities regularly visit bathhouses to provide clients with safer sex materials, such as condoms and lubricant, sexual health information, referrals, anonymous HIV and syphilis testing, and even access to professional counselling.

A small qualitative study of 23 gay and bisexual men extracted from the *Polaris HIV Seroconversion Study* sought to explore the experiences and perceptions of HIV risk associated with bathhouses. Though participants indicated that casual and/or anonymous sex was commonplace, they described the atmosphere in bathhouses as "HIV aware." Still, the HIV risk level was considered high despite the availability of condoms and lubricant because of non-verbal solicitation of sex, and drug and alcohol use. Participants also revealed a heightened feeling of safety in terms of stigma, discrimination and violence, compared to other environments, such as parks and bars. (57)

Research suggests that men who engage in one high-risk behaviour tend to engage in other high-risk behaviours, forming clusters of men at higher risk of HIV transmission. This will be discussed in greater detail in Section 4.1.12 Personal Health Practices and Coping Skills. However, in

terms of social and physical environments in which higher risk activities are reported, it is important to note that men who seek sex in environments such as bathhouses also tend to partake in or seek sex in other environments, such as public settings and through Internet sites, which may increase their vulnerability to HIV. (57;72;80;111-115)

4.2.11 HEALTH SERVICES

> These greater inherent economic and societal injustices coupled with homophobia often lead to depression, low self-esteem and a turn to risky sexual behaviour. Additionally, due to discrimination, particularly homophobic discrimination, two-spirited individuals and LGBT may not feel safe in accessing healthcare services. This delays exposure to preventative HIV/AIDS education, diagnosis of infection and care, treatment and support. (18)

There is little Canadian literature available concerning health and healthcare access for gay and other MSM. (116;117) However, a review of what does exist indicates that fear of stigma and discrimination, lack of confidentiality, sensitivity and awareness, as well as proximity of services, all impact the quality and frequency of care received by members of these populations.

Two studies that are arms of PHAC's M-Track enhanced surveillance program have found that the majority of respondents disclosed to a healthcare professional that they had male sexual partners. Results from the *ManCount* survey (the Vancouver arm of M-Track) showed that 79% of respondents disclosed to a physician or nurse that they had male sexual partners. (59) Similarly, the 2008 – 2009 cycle of the *ARGUS* survey (the Montréal arm of M-Track) found that 88.9% of respondents' physicians were aware of their patients' sexual orientation. (118) However, these results also indicate that some gay and other MSM do not discuss their sexual behaviour with healthcare staff, which can reduce access to appropriate health care.

A study on access to health care found that fear of stigma and discrimination can make gay and other MSM reluctant to communicate their health needs to staff. (60) The authors also note that the emotional and mental stress resulting from an inability to be open about their sexual orientation and gender identity in healthcare contexts can result in complacency about health issues becoming a coping mechanism. As a result, access to necessary preventive information, counselling and treatment can be delayed or not accessed at all. (119)

Living in a rural area with fewer physicians and nurses can also influence the ability of gay and other MSM to access health services. For example, fearing a loss of confidentiality can often be an issue in smaller communities. This can affect men's willingness to disclose vital health information to their physicians. (14;60) Gay men from different ethno-racial minority communities face additional barriers in accessing health care. Consequently, they may suffer from more health issues, which are underreported and therefore go untreated. (14)

There may also be differences experienced by MSM in terms of access to certain types of sexual health services. A study of young gay men in Vancouver sought to determine how often healthcare providers offered sexual risk reduction counselling. One hundred and thirty-one men enrolled in the survey, 66% of which were White and 12% were First Nations. The latter were less likely to have reported being counselled (26%) when compared with the former (62%). Repeated counselling is vital among both HIV-positive and negative individuals as a means of prevention for HIV and other STIs. (61)

In addition, healthcare providers may not be knowledgeable about the unique needs of gay and other MSM, including those who are HIV-positive and those with healthcare needs unrelated to HIV. The "serostatus of sexual partners, patient perceptions regarding the impact of antiretroviral treatments on transmissibility and feelings of HIV prevention fatigue" (120) are all factors that must be considered by a healthcare provider. Stigma, discrimination and ignorance about the specific needs and realities of this population are all identified as issues that affect access to health care for gay and other MSM. (120)

4.2.12 PERSONAL HEALTH PRACTICES AND COPING SKILLS

As discussed in Chapter 3, the number of new positive HIV tests attributed to the MSM exposure category is not decreasing. Although many MSM practise safe sex all or most of the time, HIV transmission between gay and other MSM continues to occur.

a) SAFER SEX PRACTICES

Studies have shown that many gay men and other MSM consistently practise safer sex, especially with casual partners. (4;5) According to results from the M-Track survey, over 60% of participants used condoms the last time they had anal intercourse, although less than half of those with a casual partner used a condom consistently

during insertive (47.0%) and receptive anal sex (49.6%). Men who had sex with regular partners with the same HIV status as themselves also were less likely to report consistent condom use than men having sex with regular partners with a different status. (4)

Data from the Sex Now Survey further suggest that HIV-related risk behaviours were largely confined to one quarter of survey participants. The survey also found that although casual sex was common among participants (64%), a majority of these men reported consistently safe practices (61%), while 39% reported some HIV-related risk behaviour(s). Moreover, just over half of the men (52%) who reported anal sex with a casual partner had used a condom consistently. (5)

b) UNPROTECTED ANAL INTERCOURSE

Unprotected anal intercourse (UAI), specifically receptive UAI is reported as the most common risk factor for seroconversion among MSM. (67;80;111;121) Although the majority of MSM continue to practise safe sex, a significant subset of the population engage in UAI. (5;122;123) Unprotected receptive anal sex is generally considered to be riskier than other types of sex for several reasons:

- The lining of the anus provides a large surface area containing a large number of immune cells, which are the preferred target of HIV. (62;63)
- Although HIV can cross the lining of the anus and enter the bloodstream on its own, tears can make it easier for HIV to do so. The rectum is particularly susceptible to tearing during intercourse because the lining of the anus and rectum are very thin and the rectum does not produce extra lubrication during intercourse. (62;63)

Like insertive vaginal sex, insertive anal sex is also a high-risk activity, although generally less risky than receptive anal sex. The lining of the urethra and the foreskin of the penis in uncircumcised men contain many immune cells, creating a ready target for HIV, which may be present in rectal fluids or blood. (62;63) Other biological factors, such as viral load and the presence of other sexually transmitted infections that can cause ulcers or vesicles on the penis or in the rectum, can also increase the risk of HIV transmission. (64)

In the literature, a number of factors have been associated with UAI: the unavailability of, and difficulty using condoms (including erectile difficulties); (71;124;125) trust and relationship issues; (47;118) momentary lapses; (110) depression and stressful events; and assumptions about the safety of partners and situations. (66;47;67) Furthermore, as discussed in the Section 4.1.7 of this report, Income and Social Status, trade-offs are sometimes employed by men who feel inferior and therefore forsake sex with condoms out of fear of losing the sexual encounter. (89;102) Gay men and other MSM engage in unprotected sex and other HIV-related risk behaviours as a result of various interconnected environmental, psychosocial, and personal factors. (47;65;90;108;111;113;118;126;127)

> *Initially we always had protected sex and then at some point we discussed monogamy and we both felt confident in the other person, that we could trust the other person, that if….we both tested, we both were negative and we both trusted each other that we could have unsafe sex until such time as something happened, an extramarital affair or something like that, or an extra-relational affair, and in which case we would have to renegotiate things.*
>
> —British HIV-positive male (68)

"Barebacking," also known as "raw sex" or "skin-to-skin sex," (69) is a phenomenon that has gained research interest in the past decade. Although there is some inconsistency in the use of the term, barebacking has been defined in the literature as "intentional anal sex without a condom with someone other than a primary partner." (70) Barebacking is a sociocultural and behavioural phenomenon marked by the intentional and conscious decision to seek unprotected sex. However, not all men who engage in UAI identify this practice as barebacking. The intentional aspect of barebacking distinguishes it from more general UAI discussed earlier. Some men engage in barebacking as a means of increasing physical intimacy with their partners even in cases of casual or anonymous sex, (69;124;128;129) such that it is seen as more intimate, natural and pleasurable when compared with sex with condoms. (71)

Some men who routinely engage in barebacking may endorse a specific set of values and rationales regarding sexual practices different from other gay men and other MSM. (72) Adam et al., recruited a small group of 34 men who practise barebacking to analyze this set of values and beliefs. The authors attributed high-risk behaviours and situations to diverse attitudes among distinct groups of

MSM and "taken-for-granted rules of conduct for sexual interactions." For example, many of the HIV-positive men interviewed spoke of "being part of a social environment where 'everybody knows' a set of rules whereby sex without condoms can happen as default circumstance to be interrupted only when a partner asserts a need to protect himself." (73)

Bareback culture is sometimes associated with HIV-positive men, which accounts for a small subset of the population engaging in risky sexual behaviour contributing to the increasing rates of UAI among HIV-positive men. (72;89;124)

c) MENTAL HEALTH

Research suggests that gay and bisexual men often experience poorer health outcomes than their heterosexual counterparts. (12) Specifically, gay and bisexual men report higher rates of anxiety and mood disorders, as well as increased rates of suicidal ideation. (130) The effects of homophobia and stigma and discrimination largely contribute to mental health issues among gay and bisexual men, particularly youth. (53;60;75;101;131-133) "Experiences of discrimination [and] exposure to unpredictable, episodic, or daily stress resulting from the social stigmatization of one's identity are important contributors to health disparities associated with minority sexual orientations." (132)

> *When my self-esteem is down…or I'm depressed and just sort of, you know, feeling downtrodden by the world. It's just I…get into that "I don't care" mode.*
>
> —Thirty-year-old HIV-positive male (74)

There is some evidence that mental health issues can lead to risky sexual behaviours such as UAI, (74) and may also lead to increased substance use. (75) In one study, an analysis of the link between stressful life events and risk of HIV infection was conducted using a sample from the Polaris HIV Seroconversion Study. The findings reveal that gay and bisexual men experiencing stressful life events were at increased risk of HIV infection. Specifically, more men who had reported periods of high stress had engaged in UAI than those who did not report stressful life events. (76)

> *Very up and down in my world: change of jobs, still grieving, you know, the loss of my partner, change in cities that I was living in, change in homes, selling my home and moving here in Toronto, so a lot of sh-t going on. Yeah a lot of emotional upheaval at the time.*
>
> —HIV-negative male in his 60s speaking about the events which led to unprotected sex (74)

The *BC Adolescent Health Survey*, which interviewed students from Grades 7-12 throughout British Columbia in 1992, 1998 and 2003, found that in general gay and bisexual males experienced emotional distress, such as feelings of nervousness and/or pressure, anxiety as well as suicidal ideation more often than heterosexual males. (36) Other studies in Victoria, Vancouver and Montréal have also found that gay and bisexual youth had poorer mental health outcomes when compared with hetersexual youth. (134;135)

In addition, findings from the three *BC Adolescent Health Surveys* reveal that rates of sexual and physical abuse, as well as suicide attempts, had declined among gay male youth. However, rural gay and bisexual males were more likely to have experienced sexual abuse and to have attempted suicide within the last year when compared with gay and bisexual males from urban areas. (36)

A separate anaylsis of responses from the *Vanguard Project* (January 1998 – January 2000) found that a high number of respondents had experienced some form of non- consensual sex, which was significantly associated with mental health issues, including alcohol abuse, suicidal ideation, suicide attempts and mood disorders, such as depression, anxiety and bipolar disorder. (136)

d) DRUG USE

Drug use before or during sex has been associated with higher risk sexual behaviours. Injection drug use is both an important HIV risk behaviour and the primary mode of transmission for HCV. (4) A significant amount of research reveals "statistical links between substance use and a host of behaviours deemed high risk for HIV transmission among gay and bisexual men." (137)

Phase 1 of M-Track sought to assess patterns and trends regarding recreational drug use among MSM in Canada. Participants were asked about their lifetime use of recreational drugs and their drug use behaviour in the previous six months.

Approximately 83% had used one or more recreational substances (including alcohol) before or during sex in the previous six months, and 61% had done so excluding alcohol. The most frequently used drugs were alcohol (74.1%), sexual enhancers—defined here as poppers and Viagra (39.8%)—and marijuana (38.0%). Other less frequently used substances included cocaine/crack/freebase (15.9%) and heroin or other opioids (<3.0%). "Other recreational drugs" includes Special K, Ecstasy, crystal meth, GHB, psychedelics and other amphetamines, which 21.2% of men reported using. (4)

The 2006 *Sex Now* study reported a number of findings related to drug use among gay and bisexual men in British Columbia: 90% of those surveyed use alcohol and 52% use marijuana. Users of crystal methamphetamine, a factor considered high risk for HIV infection, were most likely to live in urban areas (86.9%), particularly Vancouver (69.1%), were Caucasian (74.9%), under age 45 (82.8%), not HIV positive (75.1%) and single (55%). (5)

Research supports a connection between recreational drug use and UAI. (137-140) Recreational drug use has also been associated with seroconversion. (80) In some cases, "club drugs," such as ecstasy, nitrites, ketamine (Special K), and amphetamines are used to lower inhibitions while in social settings. (74;137;141) In a sub-sample of HIV-positive gay and bisexual men from the *Polaris* cohort, qualitative interviews revealed that some men attributed their seroconversion to impaired judgements as a result of recreational drug use. The participants reported becoming less inhibited and more careless with drug use. (137) Similarly, in a small Vancouver study, some participants indicated that they used club drugs such as crystal methamphetamine and ecstasy to enhance socialization and connectedness in group settings. "However, unlike ecstasy, crystal was associated with a distinct pattern of sexual arousal that frequently included unprotected (sometimes group) sex, was more likely to be used regularly by HIV-positive men and reportedly highly addictive and problematic." (141)

> *You shouldn't be doing drugs, shouldn't be doing barebacking, so...it just feels so... unbelievable. You've never had hotter sex.... In a nutshell, I find barebacking very erotic and the use of the drugs was enough to...lower my reasoning, inhibitions, to allow me to go for it.*
>
> —Gay male (128)

Furthermore, some studies suggest that gay men and other MSM take certain drugs to enhance their sexual performance. (141) Yet the link between these drugs and risky sexual behaviour is unclear. Myers et al., found that sexual enhancement drugs "increase sexual arousal, facilitate sexual encounters, increase the capacity for sexual behaviours, prolong sexual experiences and increase the capacity to prostitute." (137) Specifically, increased sexual activity has been attributed to crystal methamphetamine use. (5) However, the causal role it plays in risky sexual behaviours, such as multiple sexual partners and UAI, is not well understood. Some suggest that men may take on receptive positions during anal intercourse to off-set the erectile dysfunction caused by the methamphetamine use. (77) Other studies suggest that methamphetamines attract men who are inclined to risky sexual behaviours with or without the influence of drugs or alcohol. (89)

e) MSM-IDU

Research suggests that men who have sex with men and inject drugs (MSM-IDU) are at a particularly high risk of acquiring and transmitting both HIV and HCV. (113;115) The prevalence of HIV and related risk behaviours (e.g., sharing needles) is higher among MSM-IDU than other MSM or IDU. (113;115)

In a Vancouver-based study of 910 MSM, 12% (106) had injected drugs while 88% (804) had not. Of the 106 MSM-IDU, 8.5% were HIV-positive while 2.0% (795) of MSM were HIV-positive. A multivariate analysis of the sample revealed that MSM-IDUs were twice as likely to report UAI with casual partners when compared with the MSM sample. In addition, the MSM-IDUs in this cohort were more likely to be Aboriginal, younger than the MSM sample, have engaged in the sex trade and were more likely to have had sex with females. Further analysis of this cohort revealed that the most likely route of seroconversion for the MSM-IDU was through UAI rather than injection-related exposure. (138)

Targeting MSM-IDU for HIV prevention programs is essential, since they may serve as an important bridge between high and low HIV-prevalence populations, as a result of their sexual and drug-using relationships with other MSM and/or IDU and/or heterosexual women. (142)

f) COMMERCIAL SEX WORKERS

Little data is available on male sex workers. According to the 2006 *Report of the Subcommittee on Solicitation Laws*, 20% of street-involved sex workers are male or

transgender. Clients of both female and male sex workers are mostly men. Off-street sex work among males is typically limited to private establishments and clubs. (78) Studies suggest that male sex workers are less likely to be assaulted by their clients than females, but more likely to encounter violence by members of the public. (78)

M-Track respondents were asked about their involvement in the commercial sex trade in the previous six months, which was defined as having given or received money, drugs or other goods or services in exchange for oral or anal sex with a male partner. Overall, 10.2% of M-Track respondents reported giving money, drugs, or other goods or services in exchange for sex in the six months preceding the study; the proportion ranged from a low of 3.4% in Winnipeg to a high of 11.3% in Montréal. (4) Similarly, 10.1% of respondents reported receiving money, drugs or other goods or services in exchange for sex. Variations across sites were more pronounced, ranging from a low of 5.4% in Victoria to a high of 36.7% in Winnipeg. (4)

More research is needed on the impact of sex work on male HIV vulnerability and resilience.

g) RISK REDUCTION STRATEGIES

Sero-sorting

HIV-positive and negative men sometimes look for seroconcordant partners for the purpose of reducing the risk of HIV transmission and for the opportunity to have seemingly less risky unprotected sex. (120;128 In some cases, men choose to have sex with other men regardless of the other's status and employ risk reduction strategies accordingly, such as using a condom with a serodiscordant partner. (74;128)

The authors of the *Men, Sex and Love Web Study* reported from a subsample of data on partnered men that HIV-discordant couples were significantly more likely to consistently use a condom during anal sex. By contrast, being in a partnership of unknown concordance was not associated with consistent condom use. (79)

> *He was interested in unprotected [anal sex] and I said, "Well, you know, I'm HIV positive and I don't want to get what you have…. I know you're a positive too but like, yeah, it's not okay, anyways, regardless 'cause I could get what you have and I'm really not interested in getting what you have right now."*
>
> —Thirty-year-old HIV-positive male (143)

Sero-sorting often relies on assumptions instead of explicit disclosure of HIV status. (144) For instance, the literature indicates that some men make assumptions regarding their partner's serostatus based on willingness to use a condom. (89;128) However, the assumptions are often based on perceptions related to high risk, which can be inaccurate, and can also lead to other risks such as delayed condom use and exposure to other sexually transmitted infections. (80)

Strategic positioning

Strategic positioning is another risk-reduction strategy. The practice involves placing the HIV-negative man in the insertive role in anal sex when his partner is HIV-positive or has an unknown HIV status. As with sero-sorting, this practice can rely on assumptions about a partner's HIV status rather than explicit disclosure. While HIV transmission risk is somewhat lower for the insertive partner, unprotected anal sex remains a high-risk activity for both insertive and receptive partners. (81)

Viral load and antiretroviral-based prevention

Recent studies on sero-discordant heterosexual couples show that beginning treatment with antiretroviral medications as soon as a person is diagnosed HIV positive can reduce blood viral load to undetectable levels, and thus significantly reduce the risk of onward transmission. (82) However, no equivalent studies have been conducted on sero-discordant gay couples and other MSM.

Nonetheless, some HIV-positive individuals who are currently taking antiretroviral medications may rely on having an undetectable viral load to reduce the risk of HIV transmission to sexual partners. (82) Research shows, however, that HIV can still be present in semen and other fluids, even though the virus is undetectable in the blood, meaning the risk of HIV transmission remains. In addition, recent studies have also shown that "pre-exposure prophylaxis" with antiretroviral medications for HIV-negative individuals can significantly reduce the risk of seroconversion. (145)

Positive prevention

Positive (or "poz") prevention is an approach that engages people living with HIV/AIDS (including gay and other MSM who are HIV positive) in activities that can contribute to preventing onward transmission of HIV. Positive prevention may involve behaviour change, developing the communication skills and confidence to make decisions to take care of one's own health and

reduce possible harm to one's sexual partners. This topic is discussed more fully in the *Population-Specific HIV/AIDS Status Report: People Living with HIV/AIDS.*

Post-exposure prophylaxis (PEP)

For individuals who have had high-risk exposure to HIV, such as through unprotected sex, a condom breaking during sex, or sexual assault, post-exposure prophylaxis with antiretroviral drugs can reduce the risk of sero-conversion. (84) Recommendations vary by jurisdiction, and the decision to offer PEP should be made in conjunction with an HIV specialist and in accordance with provincial, territorial or regional guidelines. PEP should be started no later than 72 hours after exposure, and continued for 28 days. (85) PEP is not 100% effective in preventing HIV infection. PEP is generally available to those who have experienced occupational exposure, i.e., exposure on the job, such as a needle stick in a healthcare setting. Following non-occupational exposure, it may be available in some emergency rooms and urgent care clinics, but is not always readily available. While occupational PEP is typically covered by workplace insurance, non-occupational PEP may or may not be covered by public or private insurance. This may create an access barrier, as a month-long course of PEP can cost over $1000. Safety concerns associated with PEP include potential side effects and their effect on adherence, creation of a false sense of security leading to risk behaviours and the potential for drug resistance. (84)

AIDS optimism and HAART

When HIV/AIDS first emerged in the early 1980s, little was known about the disease. For those who became infected with HIV, fear was immense and death seemed inevitable. Twenty-five years later, the perception of the virus has changed; it is now largely viewed as a chronic but manageable condition with many HIV-positive individuals leading active and productive lives. (86) This is in large part due to the advancement in HIV therapies including highly active antiretroviral therapy (HAART). Despite an initial decrease in new HIV infections in the mid-1990s, developments in treatments, and increased prevention knowledge and awareness, the number of new infections among MSM is not declining. (87)

Some have attributed the ongoing transmission of HIV among gay and other MSM to "AIDS optimism." The availability of HAART combined with the assumption that a low viral load reduces the risk of transmission has diminished the fear of AIDS, and thus increased unsafe sex. (80;144;146;147) However, evidence suggests that AIDS optimism only explains a part of the recent increase in risky sexual behaviours; and studies do not support the connection between an increase in unsafe sex and the use of HAART and existence of undetectable viral loads. (144)

One study examined data from a subsample of the *MAYA* study, looking at the influence of viral load level on risk-taking with different types of partners among HIV-positive MSM. While the proportion of HIV-positive MSM in the study who did not use a condom changed depending on the HIV status of their partner (22.1% did not use a condom with a regular HIV-negative partner; 44.1% did not use a condom with a regular partner of unknown HIV status; 59.3% did not use a condom with a regular HIV-positive partner), viral load levels were not associated with risk-taking behaviours. (88)

In addition, a meta-analysis of 25 studies, the majority of which contained MSM, did not reveal a compelling connection between the use of HAART and an increase of unprotected sex. (86) Nevertheless, "unprotected sex was significantly more common in individuals who believed HAART decreased HIV transmission….lack of awareness of HIV infection status is a likely reason for continuing high-risk behaviours in MSM." (86)

Disclosure

> *I mentioned it at the bar. That's the way I am. When I meet someone and...there's [a] good chance that we're going to end up doing anything, I'm right up front with it.*
>
> —French Canadian male (74)

Sero-sorting as a risk management strategy depends on individuals accurately informing their partners of their serostatus before engaging in risky sexual behaviour. This is often complicated by some men's unwillingness to disclose their status. Shame, fear and insecurity all contribute to the decision not to disclose one's HIV status. (89)

It has been noted that disclosure is less common with casual partners and more frequent with partners that are more familiar to one another. (89) One study indicates that men may engage in brief sexual encounters to avoid disclosing their serostatus. (89)

A study that used data from the *Ontario Men's Survey* found that the likelihood of reporting UAI with both regular and casual partners was higher among men who always and sometimes (vs. never) disclosed their HIV status, who reported being HIV-positive (vs. those of unknown serostatus), who reported more than 10 partners, who engaged in commercial sex, and among men who used recreational drugs. (90)

A number of people living with HIV/AIDS in Canada, including gay and other MSM, have been convicted of criminal offences in cases where non-disclosure of their positive status rendered their partner's consent to sexual activity invalid (i.e., the partner was exposed to a significant risk of bodily harm and would not have consented had the disclosure been made). Disclosure, non-disclosure, and their implication for people living with HIV/AIDS are discussed more fully in the *Population-Specific HIV/AIDS Status Report: People Living with HIV/AIDS.*

Testing

HIV testing uptake is fairly high among MSM in Canada, including subpopulations of MSM. For example, the majority of men who participated in Phase 1 of M-Track reported having been tested for HIV (86%). In addition, a large portion of men who indicated that their last test was HIV negative had been tested in the two years prior to survey participation (75.2%). (4) Further, men who report higher-risk behaviours also report higher odds of testing. (4;92;148) Non-consensual condom removal during anal sex and non-disclosure of HIV-positive status by a partner have been reported as reasons for seeking HIV testing among MSM. (92)

Furthermore, it is believed that the proportion of HIV-positive gay men and other MSM who are aware of their status is higher than in the general population. It was estimated that in 2008 19% of HIV-positive gay men and other MSM in Canada were unaware of their status, compared to an estimated 26% of HIV-positive individuals in the general Canadian population who were unaware of their status (PHAC, HIV estimates, 2008). This is supported by findings from M-Track. Of the Phase 1 M-Track participants who provided a biological sample of sufficient quantity for testing and who completed a questionnaire, the prevalence of HIV was 15%. Of the men whose biological sample tested positive for HIV, 19% were unaware of their HIV-positive status. (4)

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CHAPTER 5 – CURRENT RESEARCH ON HIV/AIDS AMONG GAY, BISEXUAL, TWO-SPIRIT, AND OTHER MEN WHO HAVE SEX WITH MEN

This chapter provides an overview of research projects examining HIV/AIDS among gay, bisexual, two-spirit and other men who have sex with men (MSM) in Canada that were underway between 2006 and 2011, or under development at the end of this period. An analysis is provided of research on specific populations of gay and other MSM, as well as determinants of health related to HIV vulnerability and resilience. Potential areas for further research are outlined in the conclusion of the chapter.

5.1 METHODOLOGY

The information in this chapter was gathered from national and selected provincial organizations that fund or track HIV/AIDS research. The national funders include the Canadian Association of HIV Research (CAHR), the Canadian Foundation for AIDS Research (CANFAR), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC). Information was also gathered from the Ontario HIV Treatment Network (OHTN), *Fonds de recherche du Québec – Société et culture* (FQRSC), the Michael Smith Foundation for Health Research, and the British Columbia Centre for Excellence in HIV/AIDS.

Research projects were selected for inclusion in this chapter on the following criteria: were HIV/AIDS specific; conducted in Canada; focused on gay, bisexual, two-spirit, or other MSM; and underway or under development between 2006 and 2011. Community research capacity, research dissemination and knowledge transfer projects were also included if they sought funding for meetings, workshops and conferences on issues related to HIV/AIDS among gay and other MSM, or if their goal was to use research findings to inform program or policy development.

It was assumed that research completed prior to 2006 would have been published and therefore included in the academic and grey literature already reviewed in previous chapters of this report. Given the lag time between research and its publication, some material may not be included in either section. In addition, research funded by the private sector is not included in this report.

Exclusion criteria for this chapter were as follows:

(1) Research related to basic science, microbiology and/or clinical medicine was excluded.

(2) Research from international studies conducted abroad by Canadian researchers was excluded, unless the nature of the study provided additional insight into the lived experience of Canadian gay and other MSM.

Projects were coded according to HIV-related themes that emerged from abstracts. These themes were identified on the basis of the goals, objectives and purposes outlined in the abstracts.

A total of 48 current research projects met the criteria described above. Projects are identified in this chapter with a number (e.g., R1) corresponding to the project description listed in Appendix B.

5.1.1 METHODOLOGICAL LIMITATIONS

A limitation of the selection strategy is that some projects received grants from more than one organization, or more than one grant in a different year from the same organization. Conversely, some funding was provided to support researcher salaries, student grants, knowledge translation or operating costs. Thus, the same funding source may support more than one project over a successive period of years, where only one project is outlined in the application to the funding source. Although efforts were made to develop a comprehensive list of current Canadian research on HIV/AIDS among gay and other MSM, it is possible that relevant research activities were missed or are duplicated under different project headings.

A second limitation in the selection process is that abstracts and full descriptors were not available for all projects. In some cases, summary information about the project may not have identified gay and other MSM as a population studied nor the subpopulations and priority areas discussed in this chapter and therefore were not included. Projects unaccompanied by abstracts were included in the chapter only when any of the search terms were used in the title or noted as project keywords. Some project descriptions required further information, and, where possible, the principal investigators were contacted to determine whether their projects were specifically related to gay and other MSM in Canada. Projects for which investigators could not be reached were coded according to themes that were indicated by the title. In short, some projects relevant to gay and other MSM may not have been uncovered in the search process due to the limitations of the search strategies, exclusion criteria and the scope of this report.

5.2 ANALYSIS

This section provides an analysis of current research by geographic distribution, major themes, specific subpopulations and vulnerabilities and resiliencies to HIV. It also examines community research capacity, research dissemination and knowledge transfer projects.

5.2.1 GEOGRAPHIC DISTRIBUTION OF RESEARCH PROJECTS

As discussed in Chapter 2, available demographic data suggest that the majority of gay and other MSM are concentrated in Ontario, Quebec and British Columbia. As might be expected, more than three quarters of the projects (38 out of 48) identified for this study examine HIV among gay and other MSM in these provinces. Of the 48 projects identified, 18 focus on gay and other MSM in Ontario [R1, R2, R5, R11, R12, R13, R15, R21, R23, R26, R27, R28a/b, R37, R39, R40, R42, R45, R47], including those living in Toronto, Ottawa, London and Kingston. Thirteen focus on gay and other MSM in Quebec, mainly in Montréal [R3, R14, R15, R17, R18, R20, R31, R32, R33, R42, R43, R44, R47]. Seven focus on gay and other MSM in British Columbia [R4, R8, R10, R19, R22, R25, R48]. In addition, one project focuses on gay and other MSM in Manitoba, specifically those living in Winnipeg [R30]. Two of the remaining projects are national in scope [R6, R29]. Although information on the geographical focus of the remaining 10 projects was not available, seven are led by Ontario-based universities or organizations [R9, R16, R24, R35, R36, R41, R46], two in British Columbia [R7, R38] and one in Quebec [R34].

5.2.2 RESEARCH PROJECTS ADDRESSING PREVENTION, CARE AND TREATMENT, AND MENTAL HEALTH

Access to care and treatment strategies, prevention and mental health emerged as major research themes in the projects examined.

a) PREVENTION

As the MSM exposure category continues to account for the highest proportion of new HIV cases in Canada, prevention programs are a key element in the response to HIV/AIDS among gay and other MSM. Thirty-two of the 48 research projects identified focus on HIV prevention among gay and other MSM [R1, R2, R3, R4, R6, R7, R8, R10, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R24, R25, R28a/b, R31, R32, R33, R34, R37, R43, R44, R46, R47, R48].

Projects include those concentrated on vulnerabilities to HIV infection through psychosocial, socio-cognitive and behavioural factors [R1, R7, R15, R19, R21, R22, R25, R31, R37, R47]. Some projects focus on prevention of HIV transmission by examining unprotected anal sex [R47], virology of HIV in semen [R13], sexual networks [R8], and vaccine preparedness [R48]. Several projects examine secondary prevention by looking at HIV testing [R3, R10, R14, R20, R33, R44, R46], screening for anal cancer [R2] and co-infections [R2, R11]. Other projects examine HIV prevention through prevention programming [R1, R12, R16, R32, R33, R34], new methods in HIV prevention research [R4], the effects of the expansion of access to HAART among men in British Columbia [R19, R22] and analysis of HIV health promotion messaging [R24].

Much of the research identified addresses HIV prevention in the context of vulnerabilities and transmission. One project examined the views of MSM about potential HIV vaccines [R48]. None of the projects identified in this section examine new and emerging prevention technologies such as post-exposure prophylaxis (PEP), pre-exposure prophylaxis (PrEP), and rectal microbicides.

b) ACCESS TO CARE AND TREATMENT

Access to health care is a key determinant of health. As described in Chapter 4, gay and other MSM are less likely than heterosexuals to have their healthcare needs met. Of

the 48 projects identified, nine look at access to care [R5, R6, R9, R10, R19, R23, R25, R35, R45] and three examine treatment [R2, R19, R22]. Most of these projects investigate access to and/or uptake of healthcare services [R5, R9, R10, R19, R23, R25, R35, R45], including barriers to accessing HIV testing [R5, R10, R25]. Four projects frame the issue of access to healthcare services in the context of homophobia, discrimination and social exclusion [R5, R9, R23, R45].

One project examines barriers to healthcare access among gay and other MSM in African and Caribbean communities [R9]; another examines follow-up strategies with partners of HIV-infected men [R10]. Four projects look at HIV infection clustering in the context of epidemiological surveillance [R17], treatment [R43] and the effects of increased access to HAART in British Columbia for gay and other MSM living with HIV in the province [R19, R22].

c) MENTAL HEALTH

Mental health is a key determinant of HIV vulnerability for gay and other MSM. As discussed in Chapter 4, evidence suggests that gay and other MSM generally have poorer self-reported mental health outcomes than those of the general population. Five of the 48 research projects identified examine mental health among gay and other MSM [R5, R35, R37, R40, R41]. One project looks at the emotional well-being of lesbian, gay, bisexual, transgender and queer (LGBTQ) youth [R40]. Another includes the examination of access to mental health services, as well as other healthcare services, among gay, bisexual and other MSM in southwestern Ontario [R5]. Another project examines specific mental health issues among gay and other MSM, such as social anxiety, mood problems, alcohol and drug use, as precursors to HIV transmission risk behaviour [R37]. Two of the project abstracts do not specify an area of mental health focus: one focuses on social and structural issues affecting well-being [R41], while the second project examines the well-being of trans people and their access to health care [R35].

5.2.3 RESEARCH PROJECTS ADDRESSING SPECIFIC POPULATIONS

Of the 48 projects identified, 24 focused on gay and other MSM who are also members of other vulnerable populations or groups. Specific populations studied include gay and other MSM living with HIV/AIDS [R2, R9, R10, R11, R13, R15, R16, R19, R22, R24, R37, R39, R43, R48]; gay and other MSM who use drugs [R30, R42, R48]; MSM from countries where HIV is endemic [R9, R11, R21, R27]; LGBTQ youth who are newcomers to Canada [40]; and transmen [R12, R35, R36, R40, R45]. One project examined condom use, HIV testing and risk behaviours among two-spirit First Nations men and women [R46]. None of the projects identified examine HIV/AIDS among gay and other MSM in prisons.

a) PEOPLE WHO USE DRUGS

As discussed in Chapter 3, gay and other MSM who inject drugs are particularly vulnerable to HIV infection. Research in this area is important for tailoring response efforts to address risk behaviours among gay and other MSM who inject drugs. Of the 17 projects that focus on specific populations, three examine drug use among MSM [R30, R42, R48]. Two of these three specifically looked at injection drug use. The first study collected demographic information on injection drug use and sex trade involvement as part of a surveillance study [R30], while the second collected data on injection drug use to inform an HIV vaccine study [R48]. The third project is a qualitative study of drug use in the context of gay circuit parties [R42]. One additional project seeks to understand the motivations of gay and other MSM in the context of drug use [R22].

b) YOUTH

As discussed in Chapter 4, gay, bisexual, transgender and two-spirit youth are one of the key populations vulnerable to HIV infection. Research on this group is therefore important as they face challenges that are different from those faced by heterosexual youth, and may have an increased likelihood of engaging in risky sexual behaviour. Of the research projects identified that focus on specific populations, only one is focused on youth [R40]. This project examines the vulnerabilities of LGBTQ youth who are new to Canada.

Given that youth spend the majority of their time in school environments, projects examining school-based homophobic bullying and its impact on HIV vulnerability could help inform the development of appropriate school-based policies and programs for youth who are gay, bisexual, transgender, and two-spirit.

c) TWO-SPIRIT, GAY, BISEXUAL AND OTHER ABORIGINAL MSM

The MSM exposure category is the third most common route of HIV transmission among Aboriginal men after

injection drug use and heterosexual contact. Research on this group is important since two-spirit, gay and bisexual Aboriginal men face several factors that make them more vulnerable to HIV infection and that are unique to Aboriginal people, such as the legacy of colonization and residential schools. Only one of the research projects that were identified addresses this population. This project examines behaviours and attitudes of two-spirit First Nations men and women about HIV testing, HIV status, condom use and other HIV risk behaviours [R46].

d) GAY AND OTHER MSM FROM COUNTRIES WHERE HIV IS ENDEMIC: BLACK MEN OF AFRICAN AND CARIBBEAN DESCENT LIVING IN CANADA

The second highest proportion of HIV-positive tests among the Black population occurred in the MSM exposure category. Examining HIV among Black men is important since gay and other MSM from African and Caribbean countries face a specific combination of barriers, such as racism, homophobia, and typically lower socioeconomic status, which can increase their vulnerability to HIV infection. Analysis of current research projects that focus on specific populations identified four projects that examine issues related to HIV infection among this population [R9, R11, R21, R27]. One of these projects examines the risk behaviours of Black men who have sex with men [R21], while another project looks at the role of co-infections in HIV infection for this group [R11]. The remaining two projects aim to build ethnoracial community capacity to address HIV/AIDS. One project focuses on increasing the capacity of members of the African-Caribbean community who are HIV positive to undertake research [R9], while the second project, although not specific to African and Caribbean populations, focuses on improving capacity of the HIV sector to address HIV among ethnoracial minority MSM [R27]. More research examining the vulnerabilities and resiliencies of this group to HIV would assist in the development of appropriate interventions.

e) GAY AND OTHER MSM LIVING WITH HIV/AIDS

Chapter 3 relates how the MSM exposure category accounted for almost half of new infections in 2008 and represents over half of people already living with HIV/AIDS in Canada. Of the projects that focus on specific populations, 14 focused on gay and other MSM living with HIV/AIDS [R2, R9, R10, R11, R13, R15, R16, R19, R22, R24, R37, R39, R43, R48], with most of these examining HIV prevention (11) and/or service provision. (3) Projects focusing on prevention of HIV transmission include one project addressing gay and other MSM living with HIV/AIDS in the context of primary HIV infection clustering [R43]; one examining the connection between risk behaviour and social networking [R15]; one examining the effect of increasing access to antiretroviral therapy on the number of new HIV infections among gay and other MSM [R19]; one focusing on the physical transmission of HIV [R13]; one examining the role of co-infections on HIV transmission and progression [R11]; and one focusing on MSM living with HIV/AIDS to inform a vaccine preparedness study [R48]. Along with a prevention focus, three projects aim to inform service provision, including one that addresses the barriers to health and social services [R9]; one that investigates best practices for follow-up with sexual partners of those infected with HIV [R10]; and one that examines the mental health of those at risk for HIV and who are already living with the disease [R37]. Two projects focus on prevention of HIV/AIDS progression among those already living with HIV/AIDS [R2, R11].

f) GAY AND OTHER MSM IN PRISONS

At the time of this review, there were no research projects identified that fell within the scope of this report that examined HIV among gay and other MSM in Canadian provincial/territorial or federal prisons. Accessing people in prison for research purposes can be challenging for a range of reasons, including the complexities of gaining research ethics approval, garnering support from prison administration and staff, losing research respondents over time, etc. Compounding these difficulties, population-specific factors which affect gay and other MSM, such as stigma, discrimination, and homophobia may also prevent individual gay and other MSM in prison from participating in such studies.

The Correctional Service of Canada (CSC) routinely conducts research on people in federal prisons. Recently, the National Inmate Infectious Disease and Risk Behaviours Survey asked questions regarding same sex behaviours in prison. Unfortunately, few data from this survey were collected to identify specifically the needs of gay and other MSM in prisons.

g) TRANSMEN WHO HAVE SEX WITH MEN

Transgender and transsexual men are a unique population, some of whom identify as gay or bisexual and others who identify as male and have sex with men. While HIV prevalence and incidence among transmen is not well

understood, preliminary evidence suggests a potential for considerable vulnerability to HIV infection, given high rates of poverty, marginalization, and transphobic discrimination. Thus, there is a need to better understand the HIV vulnerabilities and resiliencies of transmen. Of the four projects identified in this section, three focus on transgender communities more broadly [R35, R40, R45] and one on transmen specifically [R36]. These projects examine the experiences of transmen in the context of HIV/AIDS [R36]; lack of access to health services among trans people [R35]; the impact of social exclusion, including transphobia, on HIV infection among newcomer LGBTQ youth [R40]; and the impact of social marginalization on HIV vulnerability among trans people [R45].

5.2.4 CO-INFECTIONS AND CO-MORBIDITIES

As discussed in Chapter 3, co-infections place significant health burdens on MSM. Research in this area is important as co-infections increase the likelihood of HIV transmission, acquisition, and disease progression. Two research projects address co-infection [R11] and co-morbidity [R2] among HIV-positive men. Project R11 addresses the role of co-infections, such as genital herpes, HPV, and gonorrhoea, in HIV transmission, acquisition, and disease progression. Project R2 examines techniques for screening for anal cancer among HIV-positive MSM. Understanding the relationship between HIV/AIDS and other infections is essential for developing comprehensive approaches to addressing co-infections.

5.2.5 RESILIENCIES AND VULNERABILITIES TO HIV

As outlined in Chapter 4, a range of socioeconomic determinants of health affect the vulnerability and resilience of gay and other MSM to HIV/AIDS. Of the 48 projects identified, 32 examine determinants of health that impact HIV vulnerability [R1, R5, R6, R7, R8, R9, R14, R15, R17, R18, R19, R20, R21, R22, R23, R24, R26, R29, R30, R31, R32, R34, R35, R37, R39, R40, R41, R42, R43, R46, R47, R48]. Health determinants identified in this section include homophobia and related stigma and discrimination; mental health; income and social status; personal health practices and coping skills; culture; social and physical environments; and social networks.

a) HOMOPHOBIA, STIGMA AND DISCRIMINATION

Homophobia and related stigma and discrimination are key underlying factors that increase vulnerability to HIV/AIDS among gay and other MSM. Understanding the impact of homophobia on HIV vulnerability is critical to improving service provision and designing appropriate interventions. Ten projects examine homophobia, stigma, and discrimination [R5, R6, R9, R15, R23, R24, R26, R34, R40, R45]. Two of these projects aim to build capacity among key stakeholders and the gay and other MSM community to examine issues of homophobia, transphobia, stigma and discrimination [R9, R23]. Of these two, one later developed into a research study addressing homophobia and social exclusion [R5]. One project examines the needs and perspectives of youth regarding homophobia and transphobia and their impact on HIV vulnerability [R40]. One project addresses personal perceptions of stigma surrounding men who arrange sexual contacts via the Internet [R15]. Another project examines stigma as it relates to the social marginalization of trans communities [R45]. One project examines experiences of heterosexism and homophobia among gay and bisexual men as a determinant of HIV vulnerability and broader health [R26]. Developing a clearer understanding of the impact of homophobia, heterosexism and related stigma and discrimination on HIV vulnerability is key to effectively addressing HIV/AIDS among gay and other MSM over the long term.

b) CULTURE

As discussed in Chapter 4, culture affects resiliency against, and vulnerability to, HIV infection. Understanding the cultural contexts of gay and other MSM may provide insight into the ways in which risk behaviours are influenced by cultural norms and values, and in turn can be used to inform the development of culturally-sensitive HIV prevention strategies.

Six projects examine ethnocultural MSM communities [R9, R21, R25, R27, R40, R46]. Two of these projects seek to build capacity for research on ethnocultural minority gay and other MSM [R9, R27]. One of these aims to inform the development of targeted prevention activities [R21], while the other focuses on newcomer LGBTQ youth [R40], Asian Canadian MSM [R25], and two-spirit First Nations men and women [R46].

Four projects were identified that examine the unique subcultures among gay and bisexual men, and how membership in these communities may impact HIV

vulnerability and resilience [R15, R39, R42, R47]. All three projects address culture through the examination of socio-cultural dimensions of different risky sexual practices: gay bathhouses [R47]; circuit parties [R42]; and using gay-cruising sites on the Internet [R13, R39].

Given the importance of cultural connectedness to HIV resilience in other key populations, such as Aboriginal peoples, a stronger understanding of the roles played by culture (including cultures specific to gay and bisexual male communities) in HIV vulnerability and resilience would inform broader efforts to address HIV among gay and other MSM.

c) SOCIAL SUPPORT NETWORKS

As discussed in Chapter 4, support from families, friends and communities is associated with better health. Use of the Internet by gay and other MSM to access support has also increased. Among the projects identified, one examines the Internet as an intervention tool [R18], while two others examine it as a means for arranging sex [R13, R39]. At the time of this review, however, no current research was identified that addressed key social support networks, such as family, friends, lovers, casual sexual relationships and chosen family as either risk or protective factors in HIV vulnerability and resilience.

d) INCOME AND SOCIAL STATUS

Chapter 4 discusses in more detail how income and social status are key determinants of health for gay and other MSM, just as they are for the broader population. Three projects examine social issues—including income, housing instability and homelessness—as factors contributing to HIV vulnerability among gay and other MSM [R9, R41, R45]. Of these, one aims to increase community capacity for conducting research on housing instability among African and Caribbean communities [R9], while another aims to increase capacity for research on factors such as employment, income, and housing instabilities on HIV vulnerability among transgender communities [R45].

e) SOCIAL AND PHYSICAL ENVIRONMENTS

The health of gay and other MSM is affected by the social and physical environments in which they live. As discussed in Chapter 4, physical and social environments, such as bathhouses and circuit parties, have been associated with increased risk behaviours, suggesting a need for research that addresses social and physical environments and their link to HIV vulnerability or resiliency. Among the projects identified, one addresses circuit parties [R42] and the other bathhouses [R47] as physical environments associated with HIV risk behaviours. No current research was found that focused on other physical and social environments, such as schools, gay neighbourhoods, parks, and rural areas, as places contributing to HIV vulnerability and resilience.

f) PERSONAL HEALTH PRACTICES AND COPING SKILLS

Unprotected anal intercourse and multiple sexual partners are key risk factors for HIV transmission. Of the 48 projects identified, 20 examine sexual behaviours as risk factors for HIV infection [R1, R7, R14, R15, R18, R19, R21, R22, R29, R30, R31, R32, R34, R37, R39, R42, R43, R46, R47, R48].

Of these projects, more than half examine risk behaviours among gay and other MSM to inform the development of HIV prevention programs. Two projects address risk behaviours in the context of social and physical environments: one examines circuit parties, crystal meth use and risky sexual practices through an ethnographic lens [R42] and the other examines barebacking in bathhouses [R47]. Another two projects examine risk behaviours in the context of social networks, specifically gay men's use of the Internet to arrange sexual contacts [R15, R39]. One project addresses the relationship between mental health and risky sexual behaviour [R37]. Two projects involve the collection of epidemiological information on HIV and STI prevalence among gay and other MSM, as well as information on risk behaviours [R14, R30]. Two projects examine the potential effects on sexual risk behaviour of expanded access to HAART among gay and other MSM living with HIV in British Columbia [R19, R22].

5.2.6 COMMUNITY RESEARCH CAPACITY, RESEARCH DISSEMINATION AND KNOWLEDGE TRANSFER

Of the 48 projects identified, 19 sought to enhance capacity for HIV research or programming, and/or support knowledge translation and policy development [R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R15, R18, R26, R27, R28a/b, R31, R32, R44].

Five projects focus on increasing capacity for HIV prevention research [R4, R6, R8, R9, R27]. Of these, two projects aim to increase capacity around factors impacting HIV vulnerability, such as stigma, discrimination, access to health care, and housing and income instability [R6, R9]. Two projects seek to enhance capacity for research or to

respond to HIV among ethnoracial minority gay and other MSM [R9, R27]. Two projects aim to develop new survey tools for HIV prevention research [R4, R8]. None of the projects, however, address research capacity development for other specific subpopulations of gay and other MSM, such as those in prison or in Aboriginal communities.

Many of the projects seek to use research findings to inform the development of HIV/AIDS policy, program, and interventions [R1, R2, R3, R7, R10, R11, R15, R18, R26]. Seven of these aim to provide strategies for preventing HIV transmission [R1, R2, R3, R7, R10, R15, R18], including projects understanding HIV risk and testing behaviours [R7, R10, R15], evaluating interventions for HIV prevention and testing [R1, R3, R18], informing anal cancer screening programs [R2], and improving research [R8]

5.3 AREAS FOR FURTHER RESEARCH

Though the following list should not be considered exhaustive, this report has revealed a number of knowledge gaps pertaining to HIV/AIDS among gay, bisexual, two-spirit and other MSM which require further study. These knowledge gaps have been identified through an analysis of chapters 2 through 4 of this report and with the assistance of the national expert working group for this report. These areas for further research include the following:

5.3.1 VULNERABILITY, RESILIENCY AND DETERMINANTS OF HEALTH

- Factors that promote resilience against HIV among gay and other MSM
- The impact of homophobia, heterosexism and related stigma and discrimination on the HIV vulnerability and resilience of gay and other MSM
- The impact of homophobic bullying on the HIV vulnerability and resilience over the life-course of gay male youth and other young MSM
- The ways in which physical and social environments (such as rural areas, schools and gay neighbourhoods) affect HIV vulnerability and resilience
- The impact of social support networks, such as family (biological and chosen), friends, lovers, casual sexual relationships, and broader communities as both risk and protective factors against HIV infection among gay and other MSM
- The impact of the Internet, including social networks, chatrooms, other social support networks and sexual health promotion websites as social support networks, on HIV resilience among gay and other MSM
- Canadian research examining the concept of syndemics, which refers to multiple, interacting epidemics in communities of gay and bisexual men (1)

5.3.2 SUB-POPULATIONS

- Demographics, HIV and co-infection epidemiology, and factors affecting the HIV vulnerability and resiliency of gay and other MSM, including research on particular sub-populations, such as the following:
  - older gay men
  - ethnocultural minority gay men, including two-spirit, gay, bisexual and other Aboriginal MSM
  - gay men living in rural areas
  - gay and other MSM in prison
  - gay and other MSM engaged in the sex trade
  - MSM who do not identify as gay or bisexual
- Demographics, HIV and co-infection epidemiology, risk behaviours and factors affecting HIV vulnerability and resilience for transmen who have sex with men, including factors such as the following:
  - the impact of transphobia and genderism on HIV vulnerability and resilience
  - HIV risk associated with female-to-male (FTM) sex reassignment surgeries
  - access to appropriate health care and support services for trans men
- Unique sub-communities of gay and other MSM (such as leather, kink, bear and newcomer communities) and how identification with these communities impacts HIV vulnerability and resilience.

5.3.3 HIV PREVENTION, CARE, TREATMENT AND SUPPORT, AND CO-INFECTION

- Health outcomes of long-term use of HAART on gay and other MSM
- Cultural competency of health professionals providing care to gay and other MSM
- How to integrate new prevention technologies, such as post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP), as well as rectal microbicides (once available) into the overall HIV prevention toolkit for gay and other MSM
- HIV co-infection, particularly HCV, and co-morbidity (e.g., anal cancer, tuberculosis) and the challenges of dealing with multiple conditions for gay and other MSM living with HIV/AIDS

5.3.4 GAY MEN'S HEALTH

The national expert working group for this report identified a need for further research on gay men's health, both in the context of HIV prevention, care, treatment and support, as well as research on gay men's health not specifically tied to HIV vulnerability and resiliency. This knowledge gap includes:

- Understanding the impact of a broader, holistic approach to gay men's health on HIV vulnerability and resiliency, prevention, care, treatment and support
- Understanding the effects of tailored healthcare services for gay men
- Examining the links between a broader, holistic approach to gay men's health and addressing syndemics (1)

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CHAPTER 6 – CURRENT RESPONSE TO HIV/AIDS AMONG GAY, BISEXUAL, TWO-SPIRIT, AND OTHER MEN WHO HAVE SEX WITH MEN

This chapter provides an overview of the strategies, coalitions, networks, organizations and programmatic responses to the issue of HIV/AIDS among gay, bisexual, two-spirit and other men who have sex with men (MSM) in Canada. It focuses exclusively on those strategies, coalitions, networks, organizations and projects that specifically addressed HIV/AIDS among gay men and other MSM. An examination of the response to the various determinants of health and how they impact gay men and other MSM was beyond the scope of this report. Nonetheless, Chapter 4 provides an in-depth examination of the determinants of health as they impact the vulnerability and resilience of gay and other MSM to HIV/AIDS.

6.1 METHODOLOGY

To obtain information on HIV-specific projects, coalitions, committees, plans and policy initiatives that existed from 2006 to 2010, information-gathering templates were circulated to federal, provincial and territorial officials through the Federal/Provincial/Territorial Advisory Committee on AIDS (F/P/T AIDS), and the Public Health Agency of Canada's (PHAC) national and regional HIV/AIDS program consultants. As discussed in Chapter 2, Toronto, Vancouver, and Montréal have greater populations of gay and other MSM when compared with other Canadian cities. As a result, projects funded by the Toronto Public Health's AIDS Prevention Community Investment Program, the Regional Health Authorities in Vancouver, and l'Agence de la santé et des services sociaux de Montréal, were also included in the analysis. Private sector organizations were not included in the information-gathering process. Although efforts were made to identify as many projects as possible, it is acknowledged that this chapter has likely not identified all projects addressing HIV among gay men and other MSM in Canada.

Projects, coalitions, committees, plans and policy initiatives were selected for inclusion in this chapter, if they fit the following criteria:

- HIV/AIDS specific;
- In existence as of 2006; and
- Specifically targeted toward gay and other MSM.

Responses lacking a description or a specified target population specified in the information-gathering template required further exploration to be included in the analysis. Where possible, the website of the organization behind each project was reviewed to determine and analyze the type of services being offered and which sub-population it addressed (if any) within the gay men and other MSM community (e.g., two-spirit, gay men and other MSM living with HIV/AIDS, GBTQ youth, gay men and other MSM from countries where HIV is endemic, and transmen).

For the sake of brevity, these projects, coalitions, committees, plans and policy initiatives will be referred to as responses throughout the chapter.

6.1.1 GAY AND OTHER MSM AS PART OF THE GENERAL RESPONSE

Gay and other MSM are included in a number of wide-ranging general responses to HIV/AIDS across Canada. However, these responses were not analyzed for this chapter because they are not specific to gay and other MSM.

There is also a movement in Canada toward a holistic approach to the health of gay and bisexual men, which goes beyond an exclusive focus on HIV/AIDS. (1) This shift acknowledges the broader health issues that gay and bisexual men, as well as lesbian, gay, bisexual, two-spirit and queer (LGBTQ) populations face beyond HIV/AIDS. It reflects an approach to HIV prevention that situates vulnerability to, and resilience against, HIV within the broader context of men's lives. (2) Although a thorough

overview of this holistic approach is outside the scope of this report, it is important to acknowledge that it is part of the Canadian landscape of research, policy and practice for gay and bisexual men's health.

6.1.2 GAY MEN AND OTHER MSM AS PART OF A COMMUNITY OR GROUP

Some organizations have projects that address gay men and other MSM as part of a target group within certain community or culturally-based organizations. Some of these responses focus on the whole community or a sub-group of it, while also supporting gay men and other MSM-specific activities; accordingly, these responses were included in the analysis.

6.1.3 GAY MEN AND OTHER MSM AS STAND-ALONE CATEGORIES

Organizations across Canada addressing HIV/AIDS have responded to the needs of gay men and other MSM by developing population-specific responses. These responses were included in the analysis as responses targeting only gay men and other MSM, which were categorized as stand-alone organizations/projects.

6.1.4 LIMITATIONS

It is important to note certain limitations of the methodology for this chapter. First, some projects, programs or initiatives, such as projects focused on health care and social services delivered by provinces and territories, may not have been captured through the information-gathering methodology used in this report. In addition, data were unavailable from some of Quebec's regional health authorities, which manage local community programs.

Second, as discussed in Sections 6.1.1 to 6.1.3, this study only includes those projects, coalitions, networks, committees, plans and policy initiatives specifically designed for gay men and other MSM, either exclusively or as part of a broader group. Responses that focus on the general population or any other specific population were excluded from the analysis. Accordingly, the projects analyzed do not represent the full list of projects that may address HIV/AIDS among gay men and other MSM as part of a broader geographic or population focus.

Third, using websites as a source for information has some limitations due to inconsistencies in updates, which may have resulted in the inclusion of services that are no longer active and the exclusion of those that are active.

6.2 POPULATION-SPECIFIC STRATEGIES

This section provides an overview of existing strategies targeting gay men and other MSM to address HIV/AIDS at national and provincial/territorial levels. As discussed in Chapter 3, the MSM exposure category in 2009 continued to account for the highest proportion of positive-HIV test reports in Canada. As a result, responses targeting gay men and other MSM are a priority for many national and provincial/territorial governments and organizations across Canada.

6.2.1 NATIONAL POPULATION-SPECIFIC STRATEGIES

The *Federal Initiative to Address HIV/AIDS* in Canada identifies gay men and other MSM as one of eight key populations at risk of, or disproportionately affected by, HIV/AIDS. (3) The *Federal Initiative* was developed as the Government of Canada's response to *Leading Together, Canada Takes Action on HIV/AIDS*. (4) *Leading Together* is a stakeholder-led document that outlines a coordinated nationwide approach to HIV/AIDS in Canada. It highlights the importance of community involvement in the response, as well as the need for culture, gender and age appropriate programs and services.

The Canadian *Aboriginal AIDS Network's Aboriginal Strategy on HIV/AIDS in Canada II for First Nations, Inuit and Métis Peoples from 2009 to 2014* identifies two-spirit people, including gay, lesbian, bisexual and inter-sex individuals, as part of the diverse Aboriginal population affected by HIV/AIDS. (5)

6.2.2 PROVINCIAL POPULATION-SPECIFIC STRATEGIES

Currently, Quebec is the only province where an HIV/AIDS strategy specific to gay men and other MSM was identified. Quebec's *Cadre de référence pour la prévention de la transmission de l'infection au VIH et des autres infections transmissibles sexuellement et par le sang (ITSS) touchant les HARSAH* was developed in 1999 and is presently under revision.

In addition, the following provinces have HIV/AIDS strategies that identify gay men and/or MSM as a population particularly affected by HIV/AIDS: Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia (see Appendix B). Some of these strategies outline specific activities directed toward gay men and other MSM as populations particularly affected by HIV/AIDS.

6.3 POPULATION-SPECIFIC NETWORKS, COALITIONS AND ADVISORY BODIES

This section provides an overview of existing HIV/AIDS-related provincial networks, coalitions and advisory bodies specific to gay men and other MSM. No national or territorial organizations of this type were identified. These networks, coalitions and advisory bodies undertake a variety of activities, such as providing advice, advocacy and research.

In Quebec, the organization COCQ-sida has several committees, including one focused on gay and other MSM. These committees identify training and knowledge-transfer projects and intervention and communication tools. COCQ-sida is the Quebec network of AIDS service organizations.

In Ontario, the Gay Men's Sexual Health Alliance (GMSH) is a coalition of gay men and their allies, including representatives from community-based AIDS service organizations, public health units, HIV researchers, policy makers, people living with HIV, and other interested individuals. The GMSH aims to foster a systematic, evidence-informed, skilled, consistent and effective response to the sexual health needs of Ontario's diverse communities of gay, bisexual, two-spirit and other MSM. It aims to reduce the transmission of HIV and other STIs, and to improve the overall health and well-being of gay, bisexual, two-spirit and other MSM. The GMSH is housed at the Ontario AIDS Network and includes a central staff and other human resource supports as needed. The GMSH produces a strategic plan to assist in the ongoing planning of sexual health services for gay/MSM. Other ongoing activities include an annual provincial sexual health summit, province-wide campaigns, the production and dissemination of tools, resources and best practices guides for use by front-line workers serving gay and other MSM. GMSH also produces and participates in community-based research. The GMSH has a Provincial Advisory Body that meets quarterly, and also has several working groups:

- The Gay/Bi/Queer Trans Men's Working Group is made up of transmen and non-transmen (both community members and service providers), who live and work in Ontario. The group aims to raise awareness and share knowledge about the sexual health of transmen.
- The Poz Prevention Working Group undertakes work on an as-needed basis, and provides feedback on events, publications, campaigns and other projects undertaken by the GMSH.
- Working groups for specific time-limited tasks, including a Campaign Working Group and GMSH Summit Planning Committee.

In addition, the AIDS Bureau of the Ontario Ministry of Health and Long-Term Care coordinates a series of policy processes to address HIV and other sexual health issues in gay men's lives, including a gay men's testing campaign, work to advance screening for anal dysplasia and anal cancer, and work to address syphilis in gay men in the province.

Manitoba has a Gay, Lesbian, Bisexual, Transgender, Two-spirited Coalition consisting of a number of community organizations with extensive experience connecting and working with gay, bisexual, two-spirit and other MSM. The Coalition has recently received funding to develop educational resources designed to promote a broader message regarding overall STI/HIV prevention and awareness.

In British Columbia, an annual Gay Men's Health Summit is hosted by the Community-Based Research Centre that brings together community members, researchers and all levels of government from the province and across the country to improve the health and wellness of gay men.

6.4 PROGRAM ANALYSIS

This section provides an overview of current projects that address HIV/AIDS among gay men and other MSM. The main objective of the data-gathering process was to identify time-limited projects addressing HIV/AIDS among gay men and other MSM in Canada. Projects identified in this section include those that were active between 2006 and 2010. Projects and their respective organizations are listed in Appendix B. It is important to note that this analysis does not include HIV/AIDS programs that have been integrated into regular provincial or territorial health care and social service delivery activities. It should also be noted that due to the time-limited nature of the projects and the time lapse between the writing and the publication of this report, some projects may no longer be active.

Projects identified in this section are analyzed according to type of organizations addressing gay men and other MSM, geographic distribution, and subpopulations of gay men and other MSM.

6.4.1 DISTRIBUTION OF ORGANIZATIONS WITH PROGRAMS/SERVICES TARGETING GAY AND OTHER MSM

A total of 67 organizations engaged in HIV/AIDS-related projects targeting gay men and other MSM. Figure 23 illustrates the distribution of these organizations by type of organization (i.e., AIDS service organizations, AIDS service organizations serving specific populations, such as ethnocultural groups, service organizations specifically for gay and other MSM, organizations serving LGBTQ populations, and community health, social service, or governmental organizations). Of the identified organizations that target gay men and other MSM, the majority (59%) were AIDS service organizations (ASOs). Twelve percent represented AIDS service organizations that offer services to specific populations, such as particular ethnocultural groups. Fifteen percent of the organizations represented community health, social services, and governmental organizations, such as public health. Nine percent of organizations identified targeted gay men and other MSM exclusively, with an additional 4% of organizations serving the LGBTQ population more generally.

6.4.2 GEOGRAPHIC DISTRIBUTION OF PROJECTS ADDRESSING GAY AND OTHER MSM

A total of 135 projects were identified that offered HIV/AIDS-related programs and services in Canada. Figure 24 illustrates the distribution of projects addressing gay and other MSM by province. Ontario, Quebec, and British Columbia had the greatest number of identified HIV/AIDS projects targeting gay and other MSM when compared with other provinces, comprising about 86% of all identified projects. In addition, 8% served gay and other MSM living in the Atlantic provinces, specifically Newfoundland and Labrador, Nova Scotia and New Brunswick. No projects were identified that were specific to gay and other MSM living in Manitoba or Northern Canada (i.e., Yukon, Northwest Territories, Nunavut).

FIGURE 23: Distribution of organizations involved in the response to HIV/AIDS among gay and other MSM, by type of organization (n=67)

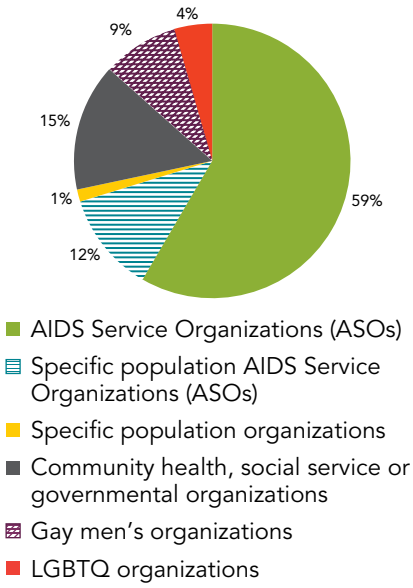
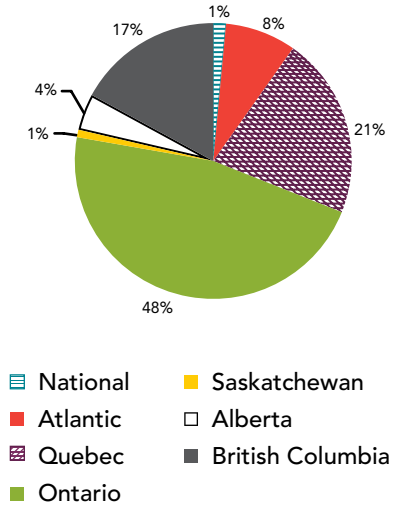


FIGURE 24: Distribution of projects addressing gay men and other MSM, by province (*n*=135)



Note. No projects were identified in Manitoba or Northern Canada (i.e., Yukon, Northwest Territories, Nunavut).

FIGURE 25: Projects addressing gay and other MSM, by topic

TOPIC	NUMBER OF PROJECTS	PROJECT ID
Providing education and information	53	G3, G4, G6, G8-G10, G12, G16, G17, G21, G22, G24, G27, G28, G30-G34, G36, G40, G44, G46, G49, G52, G54, G57, G59, G60, G62, G71-G73, G75, G77, G81-G83, G88, G91, G93, G95, G96, G97, G101, G105, G106, G109, G111, G125, G128, G129, G135
Support services	43	G5, G7, G11, G17, G18, G24, G25, G29, G34, G35, G43, G49, G50, G53, G54, G56, G61, G65, G67-G71, G73, G74, G76, G80, G81, G88, G90, G92, G100, G103, G110, G112, G113, G115, G116, G128-G130, G132, G133, G135
Outreach	26	G14, G15, G19, G23, G40-G42, G48, G51, G55, G58, G61, G63-G65, G75, G78, G89, G98, G99, G107, G114, G117, G119, G129, G131
Clinical services or referrals to care, treatment, support	22	G13, G15, G23, G29, G34, G36, G37, G75, G86, G89-G91, G97, G104, G112, G114, G118-G120, G128, G131, G134
Providing resources	17	G26, G33, G39, G41, G47, G60-G64, G72, G77, G99, G102, G106, G113, G127
Training for service providers or peers	9	G20, G45, G46, G66, G83, G97, G103, G124, G126
Knowledge development or exchange	6	G1, G2, G38, G108, G121, G123
Creating resources or guides	4	G79, G84, G85, G94

6.4.3 PROJECTS ADDRESSING GAY AND OTHER MSM

A total of 135 projects were identified through the information-gathering process described in Section 6.1 (Appendix B). It is important to note that projects that recognized gay and other MSM as part of a general response to HIV/AIDS along with other vulnerable populations (i.e., people who use injection drugs, Aboriginal Peoples, people from countries where HIV is endemic, women, youth at-risk and people in prison) were not included in this analysis because these projects were not specific to gay and other MSM.

Of the projects identified, 53 (39%) involved the provision of information through workshops or educational sessions. Topics included HIV prevention, gay men's health, sexual orientation and homophobia. An additional 17 projects (13%) provided print resources, including information brochures and pamphlets, as well as resources to prevent HIV infection, such as condoms. Six projects involved knowledge development or exchange pertaining to gay and other MSM and HIV, such as conferences, creating networks or undertaking research. An additional four projects were focused on the creation of resources or guides for gay and other MSM or for service providers. The guides covered topics such as legal issues for gay and other MSM living with HIV/AIDS, sexual health services for gay and other MSM, and information on coming out for Black lesbian, gay, bisexual and trans youth and their families.

A substantial proportion of the identified projects (44 projects or 33%) were support services, which included support groups, peer support, individual counselling, drop-in sessions and social activities. Outreach in physical environments such as bars, clubs, bathhouses and public spaces comprised 19% of the projects (or 26 projects). Nine projects (7%) included training for service providers or peers to provide prevention, care and support for gay and other MSM living with or at risk for HIV infection. Clinical services and referrals for HIV testing, treatment, counselling and other services or support made up 16% of the projects (22 projects).

6.4.4 RESPONSE TO HIV/AIDS AMONG SPECIFIC POPULATIONS WITHIN GAY MEN AND OTHER MSM COMMUNITIES

This section provides an overview of projects addressing gay and other MSM who are also members of other vulnerable populations or groups. While the majority of projects (61%) were addressed to the overall gay and other MSM population, over one-third (39%) focused on specific subpopulations of gay and other MSM. These

include Aboriginal men (Section a), men from ethnocultural groups, including those from countries were HIV is endemic (Section b), sexually diverse youth (Section c), gay men and other MSM living with HIV/AIDS (Section d), and transmen (Section e). Other subpopulations of gay and other MSM identified include those with disabilities (Section f), male sex workers (Section g) and those with substance use issues (Section h).

a) TWO-SPIRIT, GAY, BISEXUAL AND OTHER ABORIGINAL MSM

Of the projects identified, two target two-spirit, gay, bisexual or other Aboriginal MSM. Both were projects of 2-Spirited People of the 1st Nations, an organization based in Toronto. The projects provided HIV prevention services, including education and counselling on pre- and post-testing for HIV [G43, G44].

b) ETHNIC MINORITY GAY AND OTHER MSM

A total of 13 projects were identified addressing ethnic minority gay and other MSM, all of which took place in Ontario. Of these projects, more than half addressed Black, African and Caribbean gay and other MSM [G47, G48, G77-G82], while the others addressed South Asian [G73, G74], Asian [G75, G76], and Spanish-speaking [G83] gay men and other MSM. Most of the projects involved education and information provision (7 projects) and support services (6 projects).

c) SEXUALLY DIVERSE YOUTH

Nineteen projects were identified addressing sexually diverse youth. The majority served youth through education and awareness activities, such as workshops and awareness sessions [G4, G12, G17, G28, G32, G46, G95, G96, G129, G135] and support groups [G17, G50, G56, G76, G80, G100, G129, G135]. Other responses targeting youth included outreach activities [G129], providing training to young gay men to become community leaders in sexual health [G66], and the development of a publication for sexually diverse Black youth and their parents with information on coming out [G79]. One project had a more specific goal of developing an online forum for gay youth [G1].

d) GAY MEN AND OTHER MSM LIVING WITH HIV/AIDS

Twelve projects were identified that addressed gay and other MSM living with HIV/AIDS. The majority (9 projects) involved providing social support through activities such as support groups, peer support, individual counselling, drop-in sessions and social activities [G25, G61, G68, G69, G70, G71, G103, G115, G130]. One project targeted Portuguese-speaking gay and other MSM living with HIV/AIDS through community development initiatives [G61]. Two projects involved the creation of documents on legal issues for gay men, such as HIV disclosure [G84, G94]. One project was a program on positive prevention, including information on HIV transmission and risk reduction strategies, and accessing services and support [G71].

e) TRANSGENDER COMMUNITIES

Although none of the projects identified targeted transmen specifically, eight were identified that addressed the needs of transgender communities in general. Most of the projects provided support and outreach services for trans people, including the AIDS Coalition of Cape Breton's Sydney Transgender Access, Resource and Support (S.T.A.R.S.) program [G5], C.A.C.T.U.S Montréal [G20], AIDS Network Outreach and Support Society (or ANKORS) [G113], AIDS Vancouver's BOYS R Us program [G114] and PEERS Vancouver's Hustle: Men on the Move program [G129]. In addition, the 519 Church Street Community Centre in Toronto has developed a sexual health resource booklet for transmen and their partners, called "Getting Primed" [G45].

f) GAY AND OTHER MSM WITH DISABILITIES

Two projects were identified addressing gay and other MSM with disabilities. One project offers HIV and STI information to gay, bisexual, and trans youth with developmental disabilities [G95]. Another project provides information on prevention and sexual health for gay and other MSM with hearing impairments [G22].

g) GAY AND OTHER MSM AS SEX WORKERS

Four projects were identified that addressed gay and other MSM who work or previously worked in the sex trade. All four projects provide services such as outreach, prevention and education, support, and referrals to male and trans sex workers and former sex workers in Montréal [G19, G34] and Vancouver [G114, G129].

h) GAY AND OTHER MSM WITH SUBSTANCE USE ISSUES

Two of the projects identified addressed gay and other MSM with substance use issues. The project SPUNK! [G67] in Toronto uses motivational interviewing and group interventions to support substance-using gay men to make changes in use patterns and promote increased adoption of safer sex practices. The project VAMP (Vancouver Addictions Matrix Program) [G133] in Vancouver is a support program for gay men recovering from addiction to methamphetamine.

6.5 REFERENCES

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CHAPTER 7 – CONCLUSION

Gay, bisexual, two-spirit and other men who have sex with men (MSM) comprise a unique segment of the HIV/AIDS epidemic in Canada. This is the first time the Public Health Agency of Canada (PHAC) has attempted to present evidence from a variety of sources in one document to better understand the impact of HIV and AIDS on gay and other MSM. This status report does not include an exhaustive list of program, policy and research gaps, nor does it prescribe solutions to address existing gaps. However, it is hoped that the evidence provided in the report will be useful to governments, non-governmental organizations, public health officials, researchers, communities and others in informing the development of programs and policies addressing HIV/AIDS and issues related to the determinants of health in these populations.

Surveillance data indicate that gay and other MSM continue to be the population most affected by HIV/AIDS in Canada. An understanding of the true impact of HIV on this population and on specific sub-populations such as ethnocultural minority, two-spirit and other Aboriginal MSM, relative to other at-risk populations, remains a challenge because of the lack of authoritative demographic information on gay and other MSM, which would be necessary to calculate population prevalence. This report confirms that HIV/AIDS among gay, bisexual, two-spirit and other MSM is closely linked to a variety of factors and determinants of health, which influence the population's vulnerability to HIV/AIDS. Research described in this report indicates that homophobia, heterosexism and related stigma and discrimination are key overarching factors influencing all other determinants of health for gay and other MSM, and ultimately their vulnerability to HIV infection. Homophobia, in particular, is linked to poorer mental health outcomes among gay and other MSM, which in turn are associated with higher rates of risky sexual behaviour, such as unprotected anal intercourse.

Other important determinants of vulnerability include the ability—particularly for youth—to safely "come out" and be open about their sexuality without jeopardizing their safety and social support networks; the multiple sources of marginalization faced by gay and other MSM who are also members of ethnoracial minorities; reduced access to social support networks; and reduced access to safe and affirming health services, due to both a lack of awareness of the unique health concerns of gay and other MSM, as well as perceived and actual homophobia within health systems.

In terms of personal health practices and coping skills, gay and other MSM have some of the highest rates of HIV testing, and the majority of gay and other MSM take steps to protect themselves from HIV infection, including using condoms consistently and correctly. Drug use, AIDS optimism, and the influence of social and physical environments on decision making during sexual encounters may contribute to HIV risk for this population. A small number of men involved in specific sexual networks regularly engage in multiple high-risk behaviours such as barebacking and drug use.

Sources of resiliency against HIV among gay and other MSM include the ability to "come out" in a safe and supportive social context; access to social support networks, including friends, sexual and romantic partners, relational and "chosen" families, and broader gay communities; and the community resiliency demonstrated by gay activism, including the gay community's early and effective response to HIV/AIDS.

While HIV vulnerability related to sexual practices among this population is well understood, vulnerability related to other socioeconomic factors is much less well researched. More Canadian research is needed to more fully understand factors such as social support networks; healthy childhood development (including the impact of homophobic bullying); and physical and social environments other than bathhouses. Specific sub-populations whose HIV vulnerability and resilience is not well understood include ethnocultural minority MSM; trans men who have sex with men; older gay and other MSM; gay and other MSM in rural and remote areas; and gay and other MSM involved in sex work. As with other key populations, resilience against HIV among gay and other MSM is also not well understood. More research is needed to better understand and harness sources of resiliency within these populations.

The response to HIV/AIDS among gay, bisexual, two-spirit and other MSM involves a wide array of organizations, communities and governments, which have built networks across the country and encouraged knowledge exchange and culturally relevant approaches to HIV/AIDS. The

sharing of best practices across sectors and jurisdictions should be fostered and encouraged, along with increasing partnerships among a wider range of stakeholders, and better use of evidence in the development of strategies and interventions.

Since the beginning of HIV/AIDS in Canada, stakeholders involved in addressing HIV/AIDS among gay, bisexual, two-spirit and other MSM have demonstrated a strong collective will and leadership. Their unwavering dedication to increasing HIV/AIDS awareness and to reducing homophobia, heterosexism and related stigma and discrimination has contributed to better prevention, care, treatment and support for gay and other MSM at risk of, and living with, HIV. This report acknowledges the key role stakeholders have played, celebrates their successes, and highlights the ongoing commitment of governments, stakeholders and communities to addressing HIV/AIDS among gay, bisexual, two-spirit and other MSM.

APPENDIX A – SEARCH TERMS

Note that words with an ($) are search terms with several possible endings.

1) Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily and Ovid MEDLINE (1946 to present)

#	SEARCHES	RESULTS
1	exp Homosexuality, Male/	6,542
2	(msm or mesm or (men adj3 sex adj3 men) or (homme$ adj3 sex$ adj3 homme$)).tw.	5,285
3	(gaybourhood$ or gay neighbourhood$).tw.	1
4	or/1-3	9,773
5	exp transvestism/	525
6	(sexual minorit$ or gay$ or bisexual$ or homosex$ or transvest$ or same sex or same gender or sgl or down low or closet$ or 2-spirit$ or twospirit$ or gai or gais or bi spirit$ or bispirit$).tw.	20,811
7	Prostitution/	4,501
8	exp Condoms/	6,176
9	exp Safe sex/	1,647
10	(commercial sex or sex trade or sex work$ or survival sex or prostitut$).tw.	5,956
11	((money or drug$ or pay or pays or paid) adj2 sex$).tw.	2,300
12	((anal$ or oral$) adj2 (sex$ or intercourse or receptive)).tw.	6,257
13	((risk$ or unprotected or protected or unsafe or safe) adj2 sex$).tw.	10,271
14	(serosort$ or serodiscord$).tw.	365
15	(condom$ or bareback$ or bare back$).tw.	12,348
16	or/5-15	50,089
17	limit 16 to male	33,221
18	exp Men/	3,529
19	(man or men or male or males or boy$ or homme$ or garcon$ or masculin$).tw.	1,111,694
20	16 and (18 or 19)	23,563
21	17 or 20	36,649
22	4 or 21	40,877
23	(transgender$ or trans?ex$ or intersex$ or lgbt? or glbt?).tw.	4,238
24	(queer$ or transgenre$ or travesti or transvest$ or (gender adj2 identit$)).tw.	1,754
25	(trans adj5 (sex$ or gender$ or male$ or female$)).tw.	258
26	Transsexualism/	2,461
27	or/23-26	6,339
28	22 or 27	46,106
29	exp Canada/	101,466
30	(canad$ or toronto$ or montreal$ or vancouver$ or ottawa$ or british columbia$ or alberta$ or saskatchewan$ or manitoba$ or ontari$ or quebec$ or new brunswick$ or nova scotia$ or newfoundland$ or labrador$ or prince edward island$ or pei or yukon$ or nwt or northwest territor$ or nunavut$ or halifax$ or haligonian$ or winnipeg$ or regina$ or edmonton$ or calgary$ or saskatoon$ or ile du prince edouard$ or nouveau brunswick$ or colombie britannique$ or terre neuve$ or territoires du nord ouest$ or nouvelle ecosse$ or nfld).tw.	99,295
31	or/29-30	149,584
32	limit 31 to yr=2010-current	9,832
33	28 and 32	75

2) **Global Health** (1973 to february 2011) **and PsycINFO** (1987 to march week 2 2011)

#	SEARCHES	RESULTS
1	(msm or mesm or (men adj3 sex adj3 men) or (homme$ adj3 sex$ adj3 homme$)).tw.	5,322
2	(gaybourhood$ or gay neighbourhood$).tw.	1
3	or/1-2	5,322
4	(glbt$ or lgbt$ or gay$ or bisexual$ or homosex$ or transvest$ or same sex or same gender or sgl or down low or closet$ or 2-spirit$ or twospirit$ or gai or gais or bi spirit$ or bispirit$).tw.	30,256
5	(commercial sex or sex trade or sex work$ or survival sex or prostitut$).tw.	6,338
6	((money or drug$ or pay or pays or paid) adj2 sex$).tw.	2,741
7	((anal$ or oral$) adj2 (sex$ or intercourse or receptive)).tw.	5,257
8	((risk$ or unprotected or protected or unsafe or safe) adj2 sex$).tw.	13,317
9	(serosort$ or serodiscord$).tw.	402
10	(condom$ or bareback$ or bare back$).tw.	11,358
11	or/4-10	54,885
12	limit 11 to male [Limit not valid in Global Health; records were retained]	35,436
13	(man or men or male or males or boy$ or homme$ or garcon$ or masculin$).tw.	1,282,852
14	11 and 13	35,360
15	12 or 14	42,498
16	3 or 15	44,117
17	(transgender$ or trans?ex$ or intersex$ or lgbt? or glbt? or sexual minorit$).tw.	4,310
18	(queer$ or transgenre$ or travesti or transvest$ or (gender adj2 identit$)).tw.	5,455
19	(trans adj15 (sex$ or gender$ or male$ or female$)).tw.	386
20	or/17-19	8,977
21	16 or 20	50,663
22	(canad$ or toronto$ or montreal$ or vancouver$ or ottawa$ or british columbia$ or alberta$ or saskatchewan$ or manitoba$ or ontari$ or quebec$ or new brunswick$ or nova scotia$ or newfoundland$ or labrador$ or prince edward island$ or pei or yukon$ or nwt or northwest territor$ or nunavut$ or halifax$ or haligonian$ or winnipeg$ or regina$ or edmonton$ or calgary$ or saskatoon$ or ile du prince edouard$ or nouveau brunswick$ or colombie britannique$ or terre neuve$ or territoires du nord ouest$ or nouvelle ecosse$ or nfld).tw.	55,282
23	limit 22 to yr="2010-Current"	4,683
24	21 and 23	108

3) EMBASE (1996 to 2011 Week 10)

#	SEARCHES	RESULTS
1	exp Male Homosexual/	2389
2	(msm or mesm or (men adj3 sex adj3 men) or (homme$ adj3 sex$ adj3 homme$)).tw.	5421
3	(gaybourhood$ or gay neighbourhood$).tw.	0
4	or/1-3	6530
5	exp transvestism/	201
6	exp Bisexuality/	2265
7	(sexual minorit$ or gay$ or bisexual$ or homosex$ or transvest$ or same sex or same gender or sgl or down low or closet$ or 2-spirit$ or twospirit$ or gai or gais or bi spirit$ or bispirit$).tw.	11877
8	exp Prostitution/	3523
9	exp Safe Sex/	2271
10	exp Condoms/	9386
11	(commercial sex or sex trade or sex work$ or survival sex or prostitut$).tw.	3898
12	((money or drug$ or pay or pays or paid) adj2 sex$).tw.	1923
13	((anal$ or oral$) adj2 (sex$ or intercourse or receptive)).tw.	5455
14	((risk$ or unprotected or protected or unsafe or safe) adj2 sex$).tw.	9574
15	(serosort$ or serodiscord$).tw.	403
16	(condom$ or bareback$ or bare back$).tw.	8913
17	or/5-16	37693
18	limit 17 to male	21549
19	exp Men/	2980556
20	(man or men or male or males or boy$ or homme$ or garcon$ or masculin$).tw.	847772
21	17 and (19 or 20)	24815
22	18 or 21	24815
23	4 or 22	28180
24	(transgender$ or trans?ex$ or intersex$ or lgbt? or glbt?).tw.	2870
25	(queer$ or transgenre$ or travesti or transvest$ or (gender adj2 identit$)).tw.	1342
26	(trans adj5 (sex$ or gender$ or male$ or female$)).tw.	200
27	exp Transsexualism/	1728
28	or/24-27	4378
29	23 or 28	31809
30	exp Canada/	61138
31	(canad$ or toronto$ or montreal$ or vancouver$ or ottawa$ or british columbia$ or alberta$ or saskatchewan$ or manitoba$ or ontari$ or quebec$ or new brunswick$ or nova scotia$ or newfoundland$ or labrador$ or prince edward island$ or pei or yukon$ or nwt or northwest territor$ or nunavut$ or halifax$ or haligonian$ or winnipeg$ or regina$ or edmonton$ or calgary$ or saskatoon$ or ile du prince edouard$ or nouveau brunswick$ or colombie britannique$ or terre neuve$ or territoires du nord ouest$ or nouvelle ecosse$ or nfld).tw.	85413
32	or/30-31	105888
33	29 and 30	545
34	limit 33 to yr="2010 -Current"	71

4) Scopus

((((TITLE-ABS-KEY(**msm** OR **mesm** OR (**men** W/3 **sex** W/3 **men**) OR (**homme*** W/3 **sex*** W/3 **homme***))) OR (TITLE-ABS-KEY(**gaybourhood*** OR (**gay** W/2 **neighbourhood***)))) OR (((TITLE-ABS-KEY(**glbt*** OR **lgbt*** OR **gay*** OR **bisexual*** OR **homosex*** OR **transvest*** OR (**same** W/1 **sex**) OR (**same** W/1 **gender**) OR **sgl** OR (**down** W/1 **low**) OR **closet*** OR **2-spirit*** OR **twospirit*** OR **gai** OR **gais** OR (**bi** W/1 **spirit***) OR **bispirit***)) OR (TITLE-ABS-KEY((**commercial** W/1 **sex**) OR (**sex** W/1 **trade**) OR (**sex** W/1 **work***) OR (**survival** W/1 **sex**) OR **prostitut***)) OR (TITLE-ABS-KEY((**money** W/2 **sex***) OR (**drug*** W/2 **sex***) OR (**pay** W/2 **sex***) OR (**pays** W/2 **sex***) OR (**paid** W/2 **sex***))) OR (TITLE-ABS-KEY((**anal*** W/2 **sex***) OR (**anal*** W/2 **intercourse**) OR (**anal*** W/2 **receptive**) OR (**oral*** W/2 **sex***) OR (**oral*** W/2 **intercourse**) OR (**oral*** W/2 **receptive**))) OR (TITLE-ABS-KEY((**risk*** W/2 **sex***) OR (**unprotected** W/2 **sex***) OR (**protected** W/2 **sex***) OR (**unsafe** W/2 **sex***) OR (**safe** W/2 **sex***))) OR (TITLE-ABS-KEY(**serosort*** OR **serodiscord***)) OR (TITLE-ABS-KEY(**condom*** OR **bareback*** OR (**bare** W/1 **back***)))) AND (TITLE-ABS-KEY(**man** OR **men** OR **male** OR **males** OR **boy*** OR **homme*** OR **garcon*** OR **masculin***)))) OR ((TITLE-ABS-KEY(**transgender*** OR **trans*ex*** OR **intersex*** OR **lgbt*** OR **glbt*** OR (**sexual** W/1 **minorit***))) OR (TITLE-ABS-KEY(**queer*** OR **transgenre*** OR **travesti** OR **transvest*** OR (**gender** W/2 **identit***))) OR (TITLE-ABS-KEY((**sex*** W/15 **trans**) OR (**gender*** W/15 **trans**) OR (**male*** W/15 **trans**) OR (**female*** W/15 **trans**))))) AND (TITLE-ABS-KEY(**canad*** OR **toronto*** OR **montreal*** OR **vancouver*** OR **ottawa*** OR (**british** W/2 **columbia***) OR **alberta*** OR **saskatchewan*** OR **manitoba*** OR **ontari*** OR **quebec*** OR (**new** W/2 **brunswick***) OR (**nova** W/2 **scotia***) OR **newfoundland*** OR **labrador*** OR (**prince** W/2 **edward** W/2 **island***) OR **pei** OR **yukon*** OR **nwt** OR (**northwest** W/2 **territor***) OR **nunavut*** OR **halifax*** OR **haligonian*** OR **winnipeg*** OR **regina*** OR **edmonton*** OR **calgary*** OR **saskatoon*** OR (**ile** W/3 **prince** W/3 **edouard***) OR (**nouveau** W/2 **brunswick***) OR (**colombie** W/2 **britannique***) OR (**terre** W/2 **neuve***) OR (**territoires** W/3 **nord** W/3 **ouest***) OR (**nouvelle** W/2 **ecosse***) OR **nfld**)) AND (LIMIT-TO(PUBYEAR, **2011**) OR LIMIT-TO(PUBYEAR, **2010**))

APPENDIX B – CURRENT HIV/AIDS RESEARCH ON GAY, BISEXUAL, TWO-SPIRIT AND OTHER MEN WHO HAVE SEX WITH MEN (MSM) IN CANADA

Project R1

A small-group intervention to reduce HIV sexual transmission risk behaviour among HIV-positive men who have sex with men

Principal investigator: Trevor A. Hart, Ryerson University

Co-principal: Barry D. Adam

Co-investigators: Herbert Co; David E. Hoe; Robert C. Leahy; Mona R. Loutfy; Robert A. Mackay; Eleanor Maticka-Tyndale; John D. Maxwell; James R. Murray

Abstract: The primary objective of this project is to develop, implement, and provide an evaluation of an HIV prevention program for HIV-positive gay and bisexual men in a sexual health and community-based research framework. This collaboration between the Positive Prevention Working Group and researchers comes at a time when HIV rates have begun to rise among men who have sex with men, and when rates of unprotected sex have been rising among HIV-positive men. The project will build on evidence-based HIV prevention programs reported in the research literature, consult with leading developers and practitioners of prevention programs directed toward HIV-positive men across North America, and engage local men to find the kind of program they would find attractive and effective. A small-scale series of workshops will be mounted for four groups of a dozen men who have a recent history of unprotected sex. Workshop participants will subsequently be followed to discover the degree to which the intervention has a sustained effect on risk behaviour. Findings from this study will provide the foundation for a subsequent effective, evidence-based, large-scale intervention.

Dates: April 2009 – March 2011

Funder: Canadian Institutes of Health Research (CIHR) HIV/AIDS Community-Based Research Program – General – Operating Grant

Reference: CIHR database

Topic: PHA; prevention; sexual behaviour; knowledge translation

Project R2

Anal cancer screening in HIV: progression and transmission

Principal investigator: Jill M. Tinmouth, University Health Network (Toronto)

Abstract: Cancer of the anus occurs at much higher rates in HIV-infected men who have sex with men (MSM). Both anal and cervical cancers are caused by a sexually transmitted virus called human papillomavirus (HPV), so these conditions may be passed on to sexual partners. Anal Pap smears can be used to screen for precancerous anal growths. If the pap is positive, then a high-powered examination can be done to identify the precancerous growth which can then be removed using laser treatment. Our team has used HPV tests, anal Pap smears and high-power examinations of the anal canal to look for pre-cancerous changes in a large group of HIV-infected MSM. We found that the Pap smear was moderately accurate and that 1/4 of our group had advanced pre-cancerous growths. These findings are important but more knowledge is needed before formal screening programs can be instituted. In the current project, we intend to evaluate how precancerous anal growths have changed over a 4-year period in the original group of HIV-infected men that we studied. The sexual partners will also be examined to see if they have the same kinds of HPV as the original subjects. These studies will help us determine: a) how often HIV-infected men [have] to be re-checked in order to find advanced pre-cancer, b) how effective their previous treatments have been, and c) whether their partners are at risk for similar conditions. These results will help design screening programs for anal cancer.

Dates: July 2010 – June 2015

Funder: CIHR-New Investigator Award in the Area of HIV/AIDS Biomedical/C linical Research

Reference: CIHR database

Topic: biomedical/clinical research; treatment; prevention; co-infections; knowledge translation

Project R3

An analysis of the implementation of a rapid HIV testing community intervention for men who have sex with men in the Montreal area

Principal investigator: Joanne Otis, Université du Québec à Montréal

Co-principal: Robert Rousseau

Co-investigators: Martin Blais; John Cox; Gilbert Emond; Ghayas Fadel; Gaston Godin; Thomas A. Haig; Gilles Lambert; Mark A. Wainberg

Abstract: Recent data show that many men who have sex with men (MSM) and who are HIV positive are unaware of that fact. This shows that MSM are reached only somewhat or not at all by available testing services. In response to these concerns, academic and community researchers have developed the SPOT project, an innovative rapid HIV test provided by community workers who provide pre- and post-test counselling using a motivational interviewing approach, according to the participant's profile. The purpose of the study is to trace the taking of ownership of SPOT by the community by describing the implementation of the intervention, and documenting, from the standpoint of the players involved (community workers, nurses and users), the contextual factors of all kinds affecting implementation. This analysis will bring out the difficulties they encounter, the opportunities they take advantage of, and the strategies they develop to reduce obstacles and adjust the intervention. A three-year participatory study, evaluative and formative in nature, is planned. It corresponds to a case study with nested analysis levels. Several data collection methods will be used: logbooks (coordinator and workers), semi-structured interviews with workers and users (n=4000), and shared evaluation groups. In conjunction with the federal HIV/AIDS strategy, this participatory project builds the capacities of community groups and will generate useful evidence for other front-line organizations (community and others) that are interested in implementing rapid HIV testing.

Dates: April 2009 – March 2012

Funder: Canadian Institutes of Health Research (CIHR) HIV/AIDS Community-Based Research Program – General – Operating Grant

Reference: CIHR database

Topic: access to services

Project R4

Asking the right questions: a capacity building workshop to increase methodological understanding of community-based prevention research with MSM

Principal investigator: Glen Moulton

Co-investigators: Phillip G. Banks and Rick Marchand

Abstract: A consensus among community educators and prevention researchers has grown that a broader approach other than condoms and safe sex messages needs to be applied to gay men's HIV prevention. Current trends in BC research show sexual risk behaviours on the rise [across] all ages, especially young gay men. Testing frequency has declined with an increase in those who have never tested. Meeting men online has increased significantly with a subsequent decline in community involvement. Health promotion has the potential to accomplish HIV prevention by addressing the vulnerabilities underlying risk behaviour. This capacity-building workshop is needed to support a process to develop the right questions for an evidence-based strategy with the aim of reducing HIV transmission and improving health outcomes. The initiative would enhance CBR capacity within a newly created gay men's health community organization in BC mandated to do HIV prevention, and produce the direction to better understand the determinants that influence the health of gay men. It will enable the development of new partnerships, survey tools, recruitment strategies and dissemination activities. The workshop will bring together academic and non-academic prevention researchers and community and public health representatives to consider the changing environment of HIV prevention with MSM in BC, reaffirm CBR practices and conceptualize new directions in sexual health survey research for the purpose of evidence-based HIV health promotion planning.

Dates: November 2008 – October 2009

Funder: Canadian Institutes of Health Research (CIHR) – HIV/AIDS Community-Based Research Program – General - Workshop

Reference: CIHR database

Topic: prevention; social determinants of health; capacity building

Project R5

Attitudes and stigma: A community-based approach to understanding the social determinants of health with respect to HIV in MSM of London, Ontario

Principal investigator: Todd A. Coleman, University of Western Ontario

Abstract: Middlesex County, Ontario, with the largest city in Southwestern Ontario and fourth largest in the province, has the third highest incidence rate of HIV in Ontario, behind Toronto and Ottawa. Among gay, bisexual, and other men who have sex with men (GB-MSM) in Ontario, reasons for higher HIV incidence rates are not clear. In 2006, the AIDS Committee of London (ACOL) held the LGBT2SQ Health Forum, identifying three main themes: homophobia (internal/external), isolation/social exclusion, and communication. In communities affected by HIV, these factors may interact significantly to impact HIV within the group.

Goals: 1) Identify, explore, and describe themes of homophobia and social support relating to HIV and health care access. 2) Measure the prevalence of self-reported HIV seroposivity, HIV-related risk and HIV testing behaviours. 3) Describe health seeking behaviours of GB-MSM, including people living with HIV/AIDS (PHAs). 4) Determine if social exclusion, homophobia (internal/external), communication (within the community, with healthcare providers) significantly affect healthcare utilization (HIV-related care, HIV testing, mental health services, and family medicine). 5) Explore bias in a sample collected through respondent-driven sampling (RDS) methods versus traditional venue-based and time-space samples.

Methods: Interviews with fifteen (n=15) GB-MSM and five (n=5) service providers will identify new[,] and expand on themes of the LGBT2SQ Health Forum. Interview results will drive an online survey, delivered via RDS, of 400 GB-MSM.

Relevance: Local GB-MSM communities will work to achieve better health and access to services and understand how social exclusion, homophobia, and communication interact to impact HIV risk behaviour and HIV diagnostic testing; and healthcare utilization and HIV treatment for PHAs. Groups involved in health promotion and treatment for GB-MSM and other communities facing similar challenges will also benefit.

Dates: May 2008 – August 2009

Funder: CIHR HIV/AIDS Community-Based Research Program – General – Master's Award

Reference: CIHR Database

Topic: access to services; homophobia, stigma and discrimination; mental health

Project R6

Beyond behaviour: a national deliberative dialogue on research and programming in gay men's health

Principal investigator: Ed Jackson, CATIE

Abstract: We would like to be considered for HIV/AIDS Research Initiative Funding. There is an urgent need to develop [and] exchange knowledge of HIV prevention in the context of gay men's health. This can be met via dialogue on HIV research, prevention and programming for gay men between community, researchers and policy makers. The Deliberative Dialogue is an opportunity for stakeholders to identify gaps in HIV prevention programs and research, highlight areas for collaboration between researchers and research-users, build consensus on research priorities and identify high needs in KTE [knowledge translation and exchange]. In preparation for this event, a discussion document based on the PHAC Status Report for MSM and other research will be developed to highlight current research and programming directions [and] gaps, and to propose strategic directions for the future. A satellite of the 2010 CAS Skills Building Conference, this meeting will be co-chaired by Barry Adam and Ed Jackson. Participants include stakeholders from program planning, policy development and research focused on gay men. The program includes a catalyst panel of experts providing an overview of gay men's HIV prevention and sexual health programming; research initiatives in Canada involving diverse populations of gay men; and research related to stigma, discrimination and access to health services. The focus of the day will be a facilitated discussion of strategic issues in gay men's health programming and research. KTE activities used to disseminate the outcomes of the event include the creation of a consensus document which, along with background papers and presentations, will be available on the CATIE website and distributed widely. This document will be used as a catalyst in future meetings and as a guide to research priority setting and program and policy development. Opportunities for ongoing collaboration between program planners and researchers will be encouraged and facilitated to spark promising new program models.

Dates: September 2009 – August 2010

Funder: Canadian Institutes of Health Research (CIHR) – Planning Grant – Priority Announcement: Institute of Infection and Immunity

Source: CIHR database

Topic: prevention; access to services; homophobia, stigma and discrimination; capacity building

Project R7

Bringing risk prevention models into the bedroom: Sex appraisals, coping and their roles in condom use consistency

Principal investigator: Eli Puterman, University of British Colombia

Abstract: HIV transmission remains a threat in Canada and around the world. Men who have sex with men account for 41 percent of all new cases of HIV in Canada, and continue to be the largest proportion of new cases. However, recent trends suggest nearly 30 percent of new HIV cases occur among heterosexuals following sexual contact. Although new HIV drugs have brought hope to patients, they have also lessened the perception of HIV risk. In fact, new cases of HIV infection increased 17 percent in 2002, compared to 2000. Eli Puterman is developing a new model to predict and understand safe sex practices in two at-risk groups: heterosexuals with multiple partners, and men who have sex with men. While present HIV prevention models can predict the intention to use condoms, they are less successful at predicting whether condom use will actually occur, because they do not consider the uniqueness of each sexual encounter. Instead, Eli is investigating how individuals appraise and respond to HIV risk in different sexual situations over time. This research could provide a new model for HIV prevention strategies both within Canada and other developed countries.

Dates: 2005 – May 2008

Funder: Michael Smith Foundation for Health Research – 2005 Research Trainee Award, Senior Graduate Studentship

Reference: http://www.msfhr.org/who_we_fund/archive/2005/EliPuterman

Topic: prevention; sexual behaviour

Project R8

Building capacity to improve sampling and data collection methods for HIV prevention research with gay men

Principal investigator: Glen Moulton, Community-Based Research Centre (Vancouver)

Abstract: Gay men continue to be one of the priority populations for HIV research and interventions in British Columbia and Canada. 40% of 2004 HIV infections in BC were identified in men who have sex with men. In BC a network of community and public health groups conducted a provincial survey for gay men at Pride events in 2002 and 2004. Findings from *Sex Now* have informed social marketing campaigns and prevention programs. Our proposal is to organize a research capacity-building workshop to improve and expand our sampling and data collection methods on the *Sex Now* survey. Both convenience and purposive sampling methods will be examined. Our emphasis will be on how to reach gay men with research in venues, on the Internet and through social networks.

Dates: April 2006 – March 2007

Funder: CIHR HIV/AIDS Community-Based Research Program – General – Workshop

Reference: CIHR database

Topic: prevention; social and physical environments; sexual networks; capacity building

Project R9

Building partnerships and increasing community capacity for conducting HIV/AIDS, health and housing instability research in African and Caribbean communities in Canada

Principal investigators: Clemon George and Saara Greene, Fife House (Toronto)

Co-investigators: Steve Byers; David C. Este; Josephine B. Etowa; Jacqueline C. Gahagan; Winston C. Husbands; Stephen W. Hwang; Randy Jackson; Jay Koornstra; Erica S. Lawson; Jessica F. Leech; Laverne E. Monette; Sean B. Rourke; Ruthann Tucker; and Catherine A. Worthington

Abstract: The proposed partnership is aimed at building strong and sustainable relationships among academics, community-based researchers, health and social services, and community members who have a shared interest in the health and well-being of people living with HIV/AIDS from African and Caribbean communities in Canada. This partnership will succeed in building the research capacity of our community partners, advisory committee and peer researchers from African and Caribbean communities. We also aim to build partnerships that reflect a shared commitment to applied research and to increase the research capacity of the African and Caribbean HIV-positive community in Canada. To this end, this project will lead to the development of a research plan and proposal in the area of HIV/AIDS, health and housing instability in Canada's African and Caribbean communities. The partnership will enable us to highlight the housing experiences and needs of African and Caribbean communities and to address specific concerns including: high rates of housing instability; stigma and racial discrimination; and barriers to health and social services for PHAs who lack supportive and/or stable housing. Moreover, the research partnership will also support a process of identifying those communities within the larger African and Caribbean communities (e.g. women, families, MSM) who are [at] the greatest risk of homelessness and housing instability.

Dates: April 2008 – March 2009

Funder: CIHR – HIV/AIDS Community-Based Research Program – General – Catalyst Grant

Reference: CIHR database

Topic: People from countries where HIV is endemic; PHA; access to services; social determinants of health; stigma and discrimination; capacity building

Project R10

CIHR team in the study of acute HIV infection in gay men

Principal investigator: Rekart Michael, University of British Columbia

Co-principals: Babak Pourbohloul and Eric Roth

Co-investigators: Daniel Coombs, Benedikt Fischer, Mel Krajden, Gilbert Mark, Gina Ogilvie, Valencia Remple, and Terrence Trussler

Abstract: People newly infected with HIV are at their most infectious phase but mostly unaware of their infection status at this time. This is because routine tests for HIV infection are unable to identify persons in this phase as being infected. Fortunately, new laboratory testing methods can now identify HIV infection at a much earlier stage. This makes it possible to offer programs to these early infected individuals, including support to prevent transmission of HIV to others. An exciting new team of researchers has been formed to work with the gay community in British Columbia to strengthen prevention programs for persons with new infections from this community. The team members are from the biomedical sciences, public health, the social sciences, and researchers based in the community itself. The program will investigate gay men's understanding of HIV testing, their motivations and challenges in taking an HIV test, and the impacts of new testing technologies that are able to identify very infectious persons, on their testing practices. This information will be used to design messages to encourage gay men in BC to be tested for HIV. People diagnosed with early HIV infection will be offered enhanced prevention programs, which will be designed with gay community organizations and prevention experts. Gay men identified with early infections will also be interviewed to better understand their needs to fine tune the prevention programs. An important aspect of this program will be to investigate how to follow up with the sexual partners of those infected in the most efficient manner so that these partners can be offered access to prevention and follow-up programs as soon as possible. A key aspect of the research will involve the evaluation of these new programs so that they can be continually improved. The results of this research program will also be used to promote similar programs for people with new HIV infections from other communities in BC and Canada.

Dates: October 2007 – September 2012

Funder: Canadian Institutes of Health Research (CIHR) – Emerging Team Grant Program – HIV/AIDS

Reference: CIHR Database

Topic: biomedical/clinical; prevention; testing; access to services

Project R11

CIHR team in HIV and co-infections

Principal investigator: Rupert Kaul, University of Toronto

Co-principals: Scott D. Gray-Owen; Charu Kaushic; Kelly S. Macdonald; Mario A. Ostrowski; and Robert S. Remis

Co-investigators: Mona R Loutfy and Wangari E Tharao

Abstract: There is tremendous variability in the rates of HIV acquisition, disease progression and secondary transmission. We hypothesize that common co-infections are critical mediators of this variability, and may partly explain differences in HIV rates in different communities. Interventions targeted at these co-infections will provide novel strategies to prevent HIV disease progression and transmission. We will show the role of selected co-infections in three critical events: (1) enhancing HIV acquisition, through alterations in genital susceptibility; (2) accelerating disease progression, by increasing viral load and impairing host immunity; and (3) increasing secondary sexual transmission to partners. This work will focus on several co- infections, particularly genital herpes, human papilloma virus, and gonorrhea. The work will be done in close collaboration with two highly HIV-affected communities in Toronto: men who have sex with men, and the African-Caribbean community. Three types of projects are proposed. First, we will measure rates of these co-infections in HIV-affected communities; then we will do experiments, both in participating people and in the lab, to understand how these co-infections may influence HIV; finally, we will design ways to intervene, hopefully providing new strategies to prevent HIV transmission and disease. The dissemination of results back to participating communities and caregivers, in a meaningful way, is a key objective throughout this process.

Dates: October 2007 – September 2012

Funder: Canadian Institutes of Health Research (CIHR) – Emerging Team Grant Program – HIV/AIDS

Reference: CIHR Database

Topic: co-infections; prevention; people from countries where HIV is endemic

Project R12

Community-based prevention strategy to reduce vulnerability to HIV in LGTB communities

Principal investigator: Beatriz E. Alvarado, Queen's University

Co-investigators: Barry D. Adam; Gerardo Betancourt; Stevenson Ferbus; Jaime Galindo; and Jorge L. Martinez

Abstract: We are requesting funding to conduct two workshops whose main objectives are to plan a community-based prevention project to reduce HIV vulnerability in LGTB (Lesbian, Gay, Trans, Bisexual) Latino populations in Canada (Toronto) and Colombia (Cali and Pereira). The specific objectives of the activity are: 1) To identify main successful community-based research and education projects for LGTB populations implemented in Latino and other related communities in Canada, and based on those experiences, 2) To plan a community-based project that serves to implement new prevention strategies in Canada (Toronto) and Colombia (Cali, Pereira) with the aim of reducing HIV vulnerability among LGTB populations in both contexts. The workshops will be conducted with community organizations working with LGTB Latino populations in Ontario, two NGOs in Colombia working in prevention and care of people with HIV/AIDS, LGTB communities from two Colombian cities (Cali and Pereira) and from Ontario, and Canadian and Colombian academics. One workshop will be conducted in Toronto, where we will define: 1) needs that should be addressed by prevention projects; 2) major educational and promotional theories/strategies that have been proven to work in LGTB communities; 3) better ways to approach LGTB communities; and 4) important steps to build a community-based prevention project. The other workshop will be conducted in Cali, Colombia. In this workshop, we will present the conclusions of the Toronto workshop and then we will search to identify the main ways to approach the project in the Colombian LGTB communities, including the different mechanisms that could be developed to increase networking

between health providers, NGOs, researchers and LGTB communities. Our main expected outcome is to have the first outline for the community-based prevention project completed.

Dates: February 2011 – January 2012

Funder: Canadian Institutes of Health Research (CIHR) – Planning Grants – Priority Announcement: HIV/AIDS (biomedical/clinical research and health services/ population health research)

Source: CIHR database

Topic: prevention

Project R13

Correlates and control of HIV shedding and transmission in semen

Principal Investigator: Rupert Kaul, University of Toronto

Co-Principal: Dr. Charu Kaushic

Co-Investigators: Colin Kovacs, Mona Loutfy, and Janet Raboud

Abstract: The HIV-1 pandemic has claimed over 20 million lives, and 43 million people are currently infected. Sexual contact with HIV-infected semen is the major driving force behind the global pandemic, but many aspects of HIV transmission through semen are incompletely understood, and much work is needed to lay the groundwork for the development of rational public health policy and novel therapeutic strategies. Our research group has a long-standing interest in the virology, immunology and clinical correlates of HIV shedding and transmission in the genital tract, and we propose to expand our studies of HIV semen shedding to define the correlates of virus transmission within an established cohort of HIV-infected men from Toronto, as follows: 1) To understand the clinical and biological correlates of disproportionately high and low semen HIV shedding in HIV-infected men, both on and off antiretroviral therapy. 2) To study the transmission of HIV in semen across the epithelium of the female genital tract, and to study the impact of specific host and viral factors. 3) To prospectively examine differences in the characteristics of HIV in the semen and blood of HIV-infected men. These studies will help us to understand why HIV levels in semen are so variable, how levels are affected by host and viral factors, and to develop better public health and therapeutic tools to prevent HIV semen transmission.

Dates: October 2006 – September 2011

Funder: Canadian Institutes of Health Research (CIHR)-Operating grant

Reference: http://www.hivresearch.ca/index.asp?navid=17&csid1=1816

Topic: biomedical/clinical research

Project R14

Correlates of HIV testing among men who have sex with men from a Montreal cohort

Principal investigator: Serge Gallant, McGill University

Abstract: Background: *ARGUS* is a cyclical survey of Montréal MSM that monitors the occurrence of HIV and other sexually transmitted and blood-borne infections (STBBI). It is part of M-Track, the Public Health Agency of Canada's national second-generation surveillance system. Data were collected in 2005 and 2008. Objectives: To examine trends and correlates of recent HIV testing since 2005. Methods: Participants completed a self-administered questionnaire. Analysis was limited to MSM currently living in Montréal, 18 years or older and self-reported HIV-negative or of unknown status. Logistic regression analyses were stratified by year of study and adjusted for age. The outcome of interest was having had at least one HIV test within the previous 6 months. Demographics, sexual behaviours, and knowledge/beliefs on HIV were examined. Results: In total, 1,741 and 1,051 questionnaires were completed in 2005 and 2008, respectively. In the previous 6 months, 26% of men had been tested for HIV in 2005 and 41% in 2008. Multivariate analyses indicated that in 2005, engaging in risky anal intercourse (e.g., unprotected intercourse with a one-night stand) (OR=1.5 [1.2-2.0]), injecting with used needles (OR=4.1[1.4-12.1]), looking for/meeting a partner online (OR=1.7 [1.4-2.2]), and number of sexual partners (categorized in groups of 10) (c2 test for trend of odds =11.01, p<0.001) were independently and positively associated with the outcome. In 2008, the only significant variables that carried over from 2005 were meeting a partner online (OR=1.5 [1.2-2.1]) and total number of sexual partners (c2 test for trend of odds = 10.2, p< 0.01). Conclusion: While recent HIV testing by Montreal MSM increased between 2005 and 2008, the profiles of men testing between years differed. The prevalence of most risk factors remained stable across both cycles, yet some high risk-taking behaviours were no longer associated, or not as strongly associated with testing in 2008. This may be due to promotional campaigns emerging after 2005 targeting all MSM to get tested.

Dates: September 2009 – August 2010

Funder: Canadian Institutes of Health Research (CIHR) – Frederick Banting and Charles Best Canada Graduate Scholarships – Master's Award

Reference: CIHR database

Topic: testing

Project R15

Desire, place, stigma, and unsafe sex: understanding the subculture of men who use gay Internet cruise sites

Principal investigator: Patrick O'Byrne, University of Ottawa

Co-principal: Dave Holmes

Abstract: In Canada, men who have sex with men (MSM) represent the largest proportion of new HIV infections and sexual partnerships that are arranged via the Internet are described as contributing to this elevated infection rate. However, a review of the research that correlates the Internet and HIV-transmission revealed that it often excluded the perspective of MSM who live with HIV/AIDS (MSMHA). Consequently, many HIV advocacy groups have criticized researchers of further marginalizing an already stigmatized illness/group. In response to this, the first step of this project was to seek the guidance of Ontario's "Poz Prevention Group" in order to diminish these ethical/scientific issues. With such input, and the results of two previous CIHR-funded studies in bathhouses and circuit parties, the objective of this project is to qualitatively explore the role and sequence of 'desire, place, stigma, and unsafe sex' as it relates to MSMHA who meet sexual partners via the Internet. The importance of this is that it incorporates the psychosocial nature of human sexuality by acknowledging that unsafe sexual practices are not always the outcome of simple decision-making processes that follow the rules of doing what is best for one's health. This research aims at exploring this sequence in an effort to gain a better understanding of the motivations of MSMHA so as to develop more culturally sensitive HIV prevention initiatives. In other words, the goal of this project is to better understand how desire helps guide the selection of specific sexual practices and places, and how this process is also guided by public and personal perceptions of stigma. Qualitative methods will be used to explore these four dimensions as they relate to MSMHA who arrange sexual contacts via the Internet. More specifically, this will involve analysis of the websites which are used to arrange sexual contacts, in addition to 45 in-depth qualitative interviews with men in Montreal, Ottawa, and Toronto.

Dates: March 2010 – February 2011

Funder: Canadian Institutes of Health Research (CIHR) – HIV/AIDS Bridge Funding – Biomedical/Clinical Stream

Reference: CIHR database

Topic: stigma; sexual behaviour; prevention

Project R16

Development of an HIV prevention and sexual health intervention for positive men

Principal investigator: Trevor A. Hart, Ryerson University

Abstract: not available

Date: 2008

Funder: Ontario HIV/AIDS Treatment Network (OHTN)

Reference: http://www.ohtn.on.ca/Pages/Funding/Results-All.aspx

Topic: prevention; PHA

Project R17

Development of strategies to curb the HIV epidemic based on molecular epidemiological surveillance

Principal investigator: Bluma G. Brenner, Lady Davis Institute for Medical Research (Montréal)

Co-investigators: Erica E.M. Moodie; Michel Roger; and Mark A. Wainberg

Abstract: While antiretroviral therapy has prolonged and improved the lives of persons infected with HIV/AIDS, the onward spread of regional epidemics in most-at-risk populations shows no evidence of decline. Phylogenetic approaches, using large viral sequence datasets from genotyping programs, provide an important tool to identify HIV transmission networks. Our findings show half of the male-sex-male (MSM) epidemic in Quebec is driven by newly infected persons, often unaware of their status. Transmission networks arise wherein one infection is associated with 10 onward transmissions. Our study will combine phylogenetic, epidemiologic and cohort approaches to ascertain the driving forces of the provincial MSM and heterosexual epidemics with a view to improving testing, treating, and prevention paradigms so as to avert and ideally eradicate onward spread of HIV.

Dates: April 2011 – March 2014

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant

Source: CIHR database

Topic: prevention; sexual networks; biomedical/clinical

Project R18

Development of an evaluative study comparing the relative efficacy of means of intervention based on different theoretical perspectives on HIV prevention in men who have sex with men and who are HIV negative at risk of HIV infection

Principal investigator: Joanne Otis, Université du Québec à Montréal

Co-principal: Gaston Godin

Co-investigators: Michel Alary; Martin Blais; Karine J. Igartua; Gilles Lambert; René Lavoie; and Richard Montoro

Abstract: Of all persons vulnerable to HIV in Canada and Quebec, MSM account for the largest number of new and existing HIV cases (ASP, 2005; MSSS, 2004). As well, recent cohort studies report an increase in risk practices both in Montreal and Vancouver. These data demonstrate the difficulties some MSM experience in sustainably incorporating the use of condoms into their sexual scenarios, and underscore certain limitations in current approaches to health promotion. According to several authors, preventive intervention should, in addition to the sociocognitive factors associated with risk factors, target sexological factors such as the significance associated with anal sex for some MSM who take risks, and the characteristics of their preferred sexual scenarios. Through this pilot project (R&D), two innovative interventions will be developed with HIV-negative MSM, the first aimed exclusively at sociocognitive factors and the second at sexological factors. These two interventions will be developed according to two separate intervention methods, one individual and the other group-based. As well, the feasibility of future implementation of internet access will be evaluated. Validation of these two interventions will involve the participation of 32 MSM who will be asked to evaluate the resources invested, the activities produced and the objectives achieved by each one of these interventions. This pilot project should contribute to the success of HIV efforts under the Canadian federal HIV/AIDS strategy because it will develop interventions based on scientific outcomes and adapted to the needs of Montreal MSM.

Dates: March 2006 – February 2007

Funder: CIHR- Pilot project in HIV/AIDS

Reference: CIHR database

Topic: sexual behaviour; prevention

Project R19

Effect of HAART expansion on community levels of HIV viral load and HIV risk behaviours among MSM in British Columbia

Principal investigators: Robert Hogg and David Moore, Simon Fraser University

Co-investigators: Roland Barrios, Trevor A. Corneil, Vivane D. Lima, Willi McFarland, Warren D. Michelow, Julio S. Montaner, Thomas L. Patterson, and Eric Roth

Abstract: Recently the BC Ministry of Health endorsed expanding access to antiretroviral therapy (ART) as a strategy that could reduce the number of new HIV infections by reducing community infectivity levels. Guidelines have also been revised so that many more HIV-infected people may now access ART. The success of ART expansion in reducing new HIV infections might be affected if "ART optimism" causes higher levels of risk behaviour for HIV transmission. Men who have sex with men (MSM) remain the risk group most affected by HIV in Canada and BC. We wish to examine the impact of expansion of access to ART on risk behaviour among the MSM population in Greater Vancouver and on community HIV viral load as a marker of community infectivity. We will conduct two cross-sectional surveys of MSM, spaced over a 5-year period. The surveys will be designed to be representative of the ethnic and sub-cultural diversity of MSM in Greater Vancouver. We will sample 1000 MSM aged 15 years and over at each survey, using members of different sub-populations of MSM (seeds) to recruit a diverse group of MSM. All study participants will be asked to sign a consent form, complete a questionnaire, take a rapid HIV blood test, syphilis test, and hepatitis C serology, and provide consent to allow researchers access to health services databases. HIV+ participants in the surveys will be invited to enrol in a longitudinal sub-study with follow-up at 6-month intervals that will examine the effectiveness of a peer-based treatment literacy intervention for increasing ART uptake among HIV+ men currently not on treatment, and on risk behaviour for HIV transmission. The study results will assist service providers and program planners to respond to potential increases in HIV risk behaviours. The results will also directly inform policy makers in Canada and other countries with regards to the added preventive value of ART and influence decisions regarding the further expansion of ART in industrialized countries.

Dates: 2010 – 2013

Funder: CIHR HIV/AIDS Research Initiative – Health Services/Population Health Stream

Reference: Simon Fraser University website

Topic: prevention; access to services; treatment; PHA; sexual behaviour

Project R20

Evaluation of "Action to Mobilize Change" (ATOMC), a social network intervention for increasing HIV testing among MSM at high-risk for infection in Montreal

Principal investigators: John Cox and Mark Hapanowicz, AIDS Community Care Montreal

Co-investigators: Elysabeth Lacombe; Gilles Lambert; and Kenneth M. Monteith

Abstract: A social network HIV testing pilot project for MSM (Action TO Mobilize Change, ATOMC) was recently funded by the Public Health Department of the Health and Social Services Agency of Montreal. The pilot project is based on work done by the US Centers for Disease Control and Prevention using social network strategies to increase HIV testing among HIV vulnerable populations. The project has the funds to adequately coordinate and implement the intervention but insufficient resources (expertise and financial) to permit the development of a data base, data entry and detailed analyses to be able to document the effectiveness of the project. Ultimately, this research will answer the question: Are social network strategies useful for affecting HIV testing behaviours among MSM? Specifically, will more at-risk men and men not aware of their diagnosis be identified and received voluntary HIV counselling and testing in Montreal. Knowledge generated from this thorough evaluation will enable the development of a larger grant wherein social network strategies could be used for other at-risk populations including people who use injection drug[s], street-involved youth and people representing ethnocultural minorities.

Dates: October 2010 – September 2011

Funder: Canadian Institutes of Health Research (CIHR) – Catalyst Grant: HIV/AIDS Community-Based Research Program – General Stream

Source: CIHR database

Topic: testing; sexual networks

Project R21

Getting to know the community: Who are the black men who have sex with other men in Toronto?

Principal investigator: George Clemon, University of Ottawa

Abstract: Canadian studies of sexual behaviour and determinants of HIV infection among homosexual men have included Black men who have sex with men (BMSM), but the results and service implications are indeterminate for 2 main reasons: 1. researchers have found it difficult to recruit large enough numbers of BMSM for studies that are designed for (mainstream) gay populations; and 2. recruitment is normally done from places that may not be frequented by non gay-identified BMSM. This leaves us with an incomplete understanding of the risk behaviours and sexual relationships of BMSM. Further, HIV prevention activities that are designed for gay (white) men and target BMSM may not be well informed. The study seeks to: describe the risk behaviour of BMSM and variables associated with these behaviours; understand how experiences and everyday decision-making are associated with (un)protected sex; understand how BMSM interpret and assess the role of AIDS Service Organisations (ASO) in their communities. The study will use both survey and in-depth interviews. Surveys are appropriate to describe behaviours while in-depth interviews are suitable to understand behaviours. African and Caribbean identifying BMSM aged 18 years or older and living in or socializing in Toronto will be eligible to complete the survey and some individuals will be interviewed. Individuals from ASOs who are knowledgeable of BMSM will be interviewed. The study will present a clearer picture of BMSM thereby allowing health promotion agencies to design targeted prevention/intervention activities for BMSM. The study will also promote knowledge of agencies/stakeholders and ensure value for limited resources. The study addresses a knowledge gap articulated by the African and Caribbean Council on HIV/AIDS in Ontario, a coalition of agencies working with African and Caribbean communities. The research will enhance prevention and support services for BMSM through improved understanding of BMSM communities and risk behaviours.

Dates: September 2007 – August 2012

Funder: Canadian Institutes of Health Research (CIHR) – New Investigator Award in Area of HIV/AIDS Services/ Population Health Research

Reference: CIHR Database

Topic: prevention; people from countries where HIV is endemic; culture; sexual behaviour

Project R22

HAART optimism, drug use and risky sexual behaviour among MSM in British Columbia

Principal investigator: Robert Hogg, Simon Fraser University

Co-investigators: D. Moore, J. Montaner, W. McFarland, V. Lima, R. Barrios, E.R. Roth, and T. Patterson

Abstract: This proposed study examines the effect of a recently initiated population-level biomedical intervention–expanded universal and free of cost highly active antiretroviral therapy (HAART)–on HIV risk behaviours among a high-risk population, men who have sex with men (MSM), in British Columbia (BC), Canada. Of particular interest is whether the efficacy of expanded HAART access as an HIV prevention measure might be negated by socio-cultural/bio-behavioural factors, including risk compensation or "HAART optimism" within the MSM communities. The majority of new HIV infections in BC occur among MSM and this has remained largely unchanged since the year 2003 with approximately 200 new infections each year. The preventive value of HAART has been highlighted and the BC Ministry of Health has massively increased funding to expand access to HAART as a strategy to reduce the number of new HIV infections in the province. BC HIV treatment guidelines have also been relaxed so that HAART is available to almost all HIV-infected individuals in the province. Approximately 40% of persons who die from HIV-related causes in BC do not receive ART prior to death and approximately 27% of HIV-infected individuals may be unaware of their HIV status. This major expansion of access to HAART constitutes a population-level biomedical intervention—a rare, natural experiment—thereby creating an opportunity to examine the impact of expanded HAART access on complex determinants of HIV risk behaviors at the individual level. Over the 5-year study period, we propose to use respondent-driven sampling (RDS) to recruit a cohort of 270 HIV-positive and 410 HIV-negative MSM (680 in total) aged 16 years and older, and follow them up every 6 months for a median of four years. We propose to use RDS for its strength in recruiting deeply from hidden and diverse populations. Our main aims are to 1) examine trends in sexual risk behaviour and attitudes regarding the preventive value of HAART over a 4.5-year period as the numbers of MSM on HAART dramatically increase and the concept of HAART as prevention becomes widely diffused; 2) examine how self-reported drug-use before and during sex explains HIV sexual risk behaviour; and 3) examine the interactions between soft and hard drug use, HAART optimism and treatment adherence and continuation among HIV-positive MSM receiving HAART. All study participants will be asked to sign a consent form, complete a questionnaire using Computer Assisted Self-Interview technology, and undergo a rapid HIV test, syphilis test, hepatitis C serology, urine and anal swab screens for *N. gonnorhea* and *Chlamydia* trachomatis and to provide consent to allow researchers access to health services databases in the province. All HIV-positive individuals not already accessing regular HIV care will be linked to local healthcare providers for regular medical care and for assessment of need for HAART.

Dates: 2011 – 2016

Funder: National Institutes of Mental Health (United States)

Reference: Simon Fraser University website

Topic: prevention; treatment; PHA; sexual behaviour

Project R23

Health in Middlesex Men Matters (The HIMMM Project)

Principal investigator: Greta Bauer, University of Western Ontario

Abstract: In 2006, the AIDS Committee of London held the first LGBT2SQ (Lesbian, Gay, Bisexual, Transgender, Two-Spirit, Questioning) Health Forum in London, Ontario to initiate dialogue and identify health concerns in our local communities. The discussions identified three notable areas of concern: homophobia (internal and external), isolation and social exclusion, and communication. There was consensus that when LGBT2SQ persons interface with the healthcare system in the region, an area known to be socially conservative, they experience overt and covert homophobia, systemically and individually. These experiences reflect the breadth of financial, structural, personal, and cultural barriers that the Gay and Lesbian Medical Association has identified as impacting access, and have all been shown to have a spectrum of detrimental effects on personal health and well-being. For communities affected by both homophobia and HIV, these factors may interact to impact risk of new infection, late diagnosis, or less-than-optimal care for those living with HIV. With this understanding, a team of stakeholders from, and allies of, the gay, bisexual, and other men who have sex with men community was formed to examine the individual and collective impacts of these themes on HIV and health care more broadly within this community in Middlesex County. These will be accomplished through a series of stakeholder interviews and in the preparation of a survey to be delivered via respondent-driven sampling (RDS), a network-based sampling method, to gather information from the community.

Dates: 2009

Funder: Ontario HIV/AIDS Treatment Network (OHTN)

Reference: http://www.ohtn.on.ca/Pages/Funding/Results-All.aspx

Topic: access to services; homophobia, stigma and discrimination

Project R24

'HIV is no picnic': social constructions of the queer HIV-positive body in HIV prevention pedagogies of fear

Principal investigator: Domenico Calla, University of Toronto

Abstract: This thesis examines the HIV-positive queer male body as a surface for the production of meaning and discursive inscription of AIDS-related ideologies. The bodies I examine appear in a fear-based HIV prevention campaign entitled 'HIV is no picnic.' Campaign images depict four suffering bodies to highlight the consequences of unprotected sex. My analysis is situated at the juncture of queerness, disability, HIV/AIDS, and prevention pedagogy which collaborate to construct the HIV-positive body as a cultural artifact. These corporeal representations are analyzed for how HIV-related suffering (re)produces the social world by structuring the cultural intelligibility of a pandemic and the subjectivities configured within its discourse. By using a Foucauldian and phenomenological lens, I explore how 'HIV is no picnic' enlists spectators into a mediated interpretive labour of embodiment through the deployment of historically based ruling relations of power/knowledge which organize the visual scene of recognition to make bodies appear in circumscribed ways.

Date: 2007

Funder: Social Sciences and Humanities Research Council (SSHRC) – Canada Graduate Scholarships Program – Masters Scholarships

Reference: http://www.outil.ost.uqam.ca/CRSH/Detail.aspx?Cle=54736&Langue=2

Topic: prevention; PHA; homophobia, stigma and discrimination

Project R25

HIV prevention needs of Asian Canadian men who have sex with men

Principal investigators: Suji Moon and Nadine M.S. Nakamura, Simon Fraser University

Co-investigators: Benedikt Fischer, Mark P.J. Gilbert, and Robert S. Hogg

Abstract: Asian Canadian men represented 9.7 percent of new HIV cases among men in B.C. in 2008. Only a handful of studies have explored issues related to HIV and Asian men who have sex with men (MSM) in Canada. The limited data suggest that Asian MSM, particularly less acculturated immigrant men, appear to be at greater risk for contracting HIV as they are more likely to engage in unprotected anal and oral sex. U.S. studies have also found that Asian MSM have high rates of unprotected anal intercourse and sex under the influence of drugs or alcohol. Asian MSM in Canada are also at risk because they do not seek early HIV testing. Compared to other racial groups in the U.S., Asians were more likely to be at an advanced stage of AIDS and have opportunistic infections at the time of diagnosis. A significantly lower percentage of HIV-positive Asians were aware of their current CD4 count and they were less aware of care-related services compared to Whites, which puts HIV-positive Asians at a disadvantage in terms of survival. This study will explore risk factors of Asian Canadian MSM for contracting HIV and examine attitudes toward and barriers to HIV testing among Asian MSM through focus groups. Community-based participatory research will be utilized through collaboration with the Asian Society for the Intervention of AIDS (ASIA) and other community-based HIV organizations in Vancouver, BC to determine what service providers and staff view as the greatest needs for HIV prevention in their community. Community members will also be recruited to participate in focus groups about what Asian Canadian MSM perceive as strengths and limitations to current HIV prevention and what needs they have as a community. The data from the focus groups will guide the development of research questions for future quantitative data collection. These data will inform the development of culturally appropriate HIV-prevention interventions for Asian Canadian MSM.

Dates: October 2010 – September 2011

Funder: Canadian Institutes of Health Research (CIHR) – Catalyst Grant : HIV/AIDS Community-Based Research Program – General Stream

Reference: CIHR database

Topic: prevention; access to services

Project R26

Identifying social determinants of HIV-related and broader health-issues facing Kingston's gay and bisexual men's community

Principal investigator: Fergus Stevenson, Queen's University

Abstract: Together with a group of five local gay men (a community advisory board, or CAB), we conducted a study of Kingston's gay and bisexual men's community. The research was to help understand men's experiences coming or being out, involvement in and views of the gay community, HIV/AIDS, being gay in Kingston, experiences of heterosexism and homophobia, and knowledge of and experiences with HARS, the local AIDS service organization. In the spring of 2007, KAMP CAB members facilitated 11 focus groups with 53 members of the community and conducted in-depth interviews with five community leaders. After collecting the data, we analyzed it as a team. Participants were generally fairly out, and despite fear and anxiety prior to coming out, reported having had positive coming out experiences. Participants explained that hearing other people's positive coming out stories can be beneficial, and described a continuum of being out. Men mentioned a lack of a central meeting place for the community as a drawback to being gay in Kingston. Some wish for a space that wasn't a bar such as a community centre, while others wish for a gay-identified pub where community members could gather at different times during the day. Gay and bisexual men in Kingston believe that the lesbian and bisexual women's community in Kingston is more organized than the men's community. Participants were mostly not sure why that is. Despite the large effect that the HIV/AIDS epidemic has had on gay and bisexual men in Canada, HIV is not discussed in a community context. Men see HIV as an individual issue, not something that affects the community as a whole. Focus group discussions of homophobia were contradictory. Most participants initially reported that Kingston and the area is not a very homophobic place. Participants also reported feeling, however, that a certain amount of homophobia is inevitable, and told stories of verbal and physical harassment. To date, we have conducted a number of activities and produced a number of documents to disseminate our experiences and findings to the community, practitioners, and academics. These have included a community presentation and discussion, postcard-type brochures, a presentation to HARS staff, four conference presentations, and six invited

lecturers. The results of our study have already been integrated into HARS's gay and bisexual men's outreach strategy, resulting in expanded counselling services and new promotional flyers dedicated to raising the visibility of the agency's services for men regardless of their HIV status. We have submitted two papers for publication in academic journals, and plan to submit more. We contracted with two professional filmmakers to create a 10-minute animated short film in order to distribute our results more widely. The film can be viewed at http://www.youtube.com/KampKingston. Finally, we conducted a process evaluation of the project, focused on the extent to which the project followed principles of community-based research.

Dates: September 2006 – August 2007

Funder: Ontario HIV Treatment Network (OHTN)

Reference: http://www.hivresearch.ca/index.asp?navid=17&csid1=2278

Topic: homophobia, stigma and discrimination; social and physical environments; capacity building

Project R27

Improving the capacity of the HIV sector to respond to ethno-racial MSM: tapping front-line expertise and wisdom

Principal investigator: Alan Li, Asian Community AIDS Services

Abstract: N/A

Date: 2007

Funder: Ontario HIV/AIDS Treatment Network (OHTN)

Reference: http://www.ohtn.on.ca/Pages/Funding/Recipient-Profiles-Alan-Li.aspx

Topic: people from countries where HIV is endemic; capacity building

Project R28 (a)

Keeping gay and bisexual men safe: a history of HIV prevention work in Toronto

Principal investigator: Adam Green, University of Toronto

Abstract: HIV prevention work for men who have sex with men (MSM) represents a front-line institutional response to the HIV/AIDS epidemic, but one that is highly contested and complex in its organization, substance and execution. This study provides a social history of MSM HIV prevention work in Toronto--a city with the highest concentration of HIV-infected MSM and one of the most well-developed outreach and prevention programs in Canada. The study will focus on the institutional processes that underpin front-line HIV prevention outreach and service organizations, including: 1) How have MSM HIV prevention programs executed prevention services over time and what has been their relationship to each other and to the state? 2) What expert epidemiological, social scientific and local folk knowledges regarding HIV have emerged over the past 25 years and how have they been translated to prevention work? 3) What impact have external stakeholders, including federal and provincial funders and non-state actors such as the media and ethnic-based community leaders, had on the form and substance of prevention work? 4) How has the target MSM subject been constructed in discourse and how has it changed over time? Through interviews with past and present service providers, organizational leaders and policy makers, along with archival research and analysis of prevention materials and organizational documents and minutes, the study will examine the history in which key AIDS Service Organizations (ASO) and ethnocultural community-based organizations contested, coordinated and transformed HIV prevention for the MSM population of Toronto.

Dates: April 2009 – March 2014

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant

Source: CIHR database

Topic: prevention; capacity building

Project R28 (b)

Keeping gay and bisexual men safe: a history of HIV prevention work in Toronto

Principal investigator: Adam Green, University of Toronto

Abstract: HIV prevention work for men who have sex with men (MSM) represents a front-line institutional response to the HIV/AIDS epidemic, but one that is highly contested and complex in its organization, substance and execution. This study provides a social history of MSM HIV prevention work in Toronto--a city with the highest concentration of HIV-infected MSM and one of the most well-developed outreach and prevention programs in Canada. The study will focus on the institutional processes that underpin front-line HIV prevention outreach and service organizations, including: 1) How have MSM HIV prevention programs executed prevention services over time and what has been their relationship to each other and to the state? 2) What expert epidemiological, social scientific and local folk knowledges regarding HIV have emerged over the past 25 years and how have they been translated to prevention work? 3) What impact have external stakeholders, including federal and provincial funders and non-state actors such as the media and ethnic-based community leaders, had on the form and substance of prevention work? 4) How has the target MSM subject been constructed in discourse and how has it changed over time? Through interviews with past and present service providers, organizational leaders and policy makers, along with archival research and analysis of prevention materials and organizational documents and minutes, the study will examine the history in which key AIDS Service Organizations (ASO) and ethnocultural community-based organizations contested, coordinated and transformed HIV prevention for the MSM population of Toronto.

Dates: September 2009 – August 2014

Funder: Canadian Institutes of Health Research (CIHR) – New Investigator Award

Reference: CIHR database

Topic: prevention; capacity building

Project R29

Male-call Canada: An in-depth study of current and emerging issues, and the changing social and behavioural determinants related to HIV transmission among men who have sex with men

Principal investigator: Ted Myers, University of Toronto

Abstract: This proposal results from a national research needs assessment, entitled. *The 2005 Sexual Health Promotion Research Needs Assessment for Men Who have Sex with Men in Canada*, which was undertaken by the research team with funding from NHRDP/CIHR. This study will utilize a 1-800 toll-free telephone number method, which has been successfully utilized in Australia, New Zealand, the United Kingdom and Canada, to survey a broad national sample of men who have sex with men. The study is undertaken by a team of investigators from across Canada, and includes both academic and community researchers, along with a National Advisory Committee. In order to ensure a high level of response a multidimensional promotional campaign that seeks to blanket Canada, as a whole, will be undertaken. The major goal of Male Call Canada is to conduct a cross-sectional nationwide toll-free telephone survey to gather self-reported information on a broad spectrum of HIV behaviours and related social and behavioural determinants and issues for men who have sex with men (MSM) in Canada. The telephone survey will permit the acquisition of data from closed ended fixed-choice questions, as well as exploratory open-ended questions, with a subgroup of the participants. Quantitative and qualitative data analysis will be undertaken.

Dates: October 2006 – Ongoing

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant

Reference: CIHR database

Topic: sexual behaviour

Project R30

MSM and WSW in sexual networks in Winnipeg, Manitoba: Exploring changes in network dynamics and HIV risk

Principal investigator: Stephanie S. Harvard, University of Manitoba

Abstract: Statement of the problem: Men who have sex with men (MSM) are a high-risk group for HIV infection. Women who have sex with women (WSW) may be at elevated risk for HIV from male sex partners.

Methods: The 'M-Track' HIV surveillance study of MSM was conducted in Winnipeg, Manitoba. A pilot study was undertaken concurrently to assess HIV risk among WSW. Convenience samples of MSM and WSW were surveyed concerning HIV risk behaviours and tested for HIV, hepatitis C, and syphilis.

Results: MSM and WSW surveyed reported inconsistent condom use and high rates of injection drug use and sex trade involvement. Prevalence of blood-borne pathogens was high among both groups. High rates of response error suggested difficulty in survey participation among both groups.

Conclusions: The samples of MSM and WSW reached may represent a high-risk subset of MSM and WSW. Study methods may be improved to better invite and be appropriate for diverse participants.

Dates: September 2006 – August 2008

Funder: CIHR- HIV/AIDS Community-Based Research Program – General – Master's Award

Reference: CIHR Database

Topic: injection drug use; sexual behaviour

Project R31

Socio-structural parameters of the individualization of sexual risk-taking and typical trajectories of HIV infection in MSM

Principal investigator: Martin Blais, Université du Québec à Montréal

Abstract: Despite numerous prevention campaigns that have had a positive effect on the sexual behaviours of MSM, these individuals still account for a large percentage of persons newly infected with HIV. However, it is not true that all the men who have contracted the virus have taken the same sexual risks, or that they have taken them for the same reasons. Martin Blais, a sexology researcher at the Université du Québec à Montréal, has studied the personal accounts of 24 men who have sex with men, aged 23 to 60, and who contracted the virus through sexual relations. The objective was to understand the reasons, circumstances, and trajectory that led to HIV infection. Martin Blais has identified five typical trajectories. These include three in which infection is the conclusion of a series of events that disrupt life and sexual scenarios. Sexual risk taking can be a way of escaping an onerous day-day-existence, or an expression of love towards the partner, or a sign of renewed exhilaration. In other trajectories, HIV infection is the expected outcome of a risk-focused lifestyle. Some men said the infection was totally unexpected, and that they had taken every precaution to prevent it. This research clearly shows that there are many routes to the infection. The heterogeneity of these profiles underscores the importance of formulating educational prevention messages that do not assume a single profile, but that reflect the life experiences and concerns of the men they target.

Dates: 2006 – 2007

Funder: FQRSC

Reference: FQRSC database

Topic: prevention; sexual behaviour; capacity building

Project R32

Phénix: an opportunity to mobilize organizations involved with HIV and STDs

Principal investigator: Joanne Otis, Université du Québec à Montréal

Co-investigators: Stephen T. Alexander; Martin Blais; Ghayas Fadel; Gilles Lambert; Jean-Marie Le Gall; and Richard Montoro

Abstract: In the wake of the disturbing results from the Omega Cohort and the *Argus* survey, conducted in the Montréal gay community and showing a resurgence of at-risk anal relations, a number of researchers involved in these two studies joined with the community to develop an innovative intervention (Phénix) aimed at reducing at-risk behaviours for HIV infection in the Montréal gay community. From 2006 to 2007, the Phénix program was developed and validated by a multidisciplinary team of researchers and their community partners through a CIHR funding initiative (pilot project). Following the validation of Phénix in 2007, a number of Quebec and Canadian community organizations took the preparatory training for Phénix implementation in their communities. However, owing to a lack of funding, this further implementation is not currently supported by a research process. We therefore propose to organize a workshop which would be attended by researchers, community workers or leaders and decision makers involved in HIV and STD efforts with men who have sex with men, in order to mobilize them around the Phénix program. The specific goals of the workshop are: 1. to share knowledge and experiences around Phénix implementation; 2. to support community actors in implementing Phénix in their communities; 3. to issue recommendations for improving and adapting the program on the basis of implementation experiences; 4. to develop, in partnership, the bases of a community research program to evaluate the implementation and efficacy of Phénix in the communities.

Dates: September 2009 – August 2010

Funder: Canadian Institutes of Health Research (CIHR) – Meetings, Planning and Dissemination Grant – Planning Grant – Priority Announcement: Institute of Infection and Immunity

Reference: CIHR database

Topic: prevention; sexual behaviour; capacity building

Project R33

Pro-active intervention to limit HIV transmission among MSM populations

Principal investigator: Mark A. Wainberg

Co-investigators: Martin Blais; Bluma G. Brenner; John Cox; Gilbert Emond; Gaston Godin; Gilles Lambert; Joanne Otis; and Michel Roger

Abstract: This project brings together a team from the Réseau SIDA of the FRSQ to work together HIV prevention regarding men who have sex with men (MSM). Our project is based on the competence of virologists, public health officials, social scientists, clinicians, and community workers and will utilize a pro-active approach to try to identify individuals who are at risk of both contracting and transmitting HIV. We believe that an earlier diagnosis, accompanied by efficient counselling, will lead to far lower rates of HIV transmission. The project will utilize a rapid test procedure to diagnose HIV infection on the basis of serology, but will also involve testing of blood samples, in order that recently infected individuals who test negatively on the basis of an antibody test, may potentially be diagnosed using more sensitive nucleic acid-based diagnostic procedures (Polymerase Chain Reaction). The success of this project will be measured by whether or not lower HIV infection rates prevail among members of the Montreal MSM community during the final stages of the work, as well as by whether we are able to demonstrate a smaller number of new HIV transmission clusters within the MSM population in addition to fewer numbers of infected individuals on average within a cluster.

Dates: November 2007 – October 2010

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant: HIV Prevention

Reference: CIHR database

Topic: testing; biomedical/clinical

Project R34

Project PRIDE (Promoting Resilience in Discriminatory Environments): a primary HIV prevention intervention for gay/bisexual men

Principal investigators: Trevor A. Hart and Nathan G. Smith, McGill University

Co-investigators: Barry D. Adam and Martin Blais

Abstract: Prevalence rates of HIV infection in young gay and bisexual (GB) men have increased in recent years. Young GB men face personal and societal challenges related to their sexual orientation; moreover, these challenges have implications for HIV prevention. Minority stress, such as anti-gay discrimination (instances of verbal or physical threats or attacks) and internalized homophobia (the internalization of negative societal views about bi/homosexuality), is a constant stressor facing young GB men. Minority stress has been shown to be related to negative psychological health outcomes, substance use/abuse, and HIV-risk behaviours. However, HIV prevention interventions aimed at young GB men have not addressed minority stress and its correlates. The purpose of the current study is to develop and test a group psychotherapy intervention for young GB men to develop adaptive coping strategies for dealing with minority stress. The efficacy of this type of intervention in the reduction of HIV risk behaviours will be explored. The intervention will be developed based on existing models and theory, along with the results of focus groups with service providers and young GB men. The intervention is expected to consist of 10 sessions that will address minority stress, social support, and HIV risk behaviours. Post-test and follow-up assessments will determine the efficacy of the intervention's ability to reduce negative mental health outcomes, substance use/abuse, and HIV-risk behaviours.

Dates: October 2010 – September 2012

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant – Priority Announcement: HIV/AIDS Research Initiative – Health Services – Population Health Stream

Reference: CIHR database

Topic: prevention; homophobia, stigma and discrimination; sexual behaviour

Project R35

Research on transpeople's lack of access to healthcare services and its effects on their health and well-being

Principal investigator: Anna Travers, Sherbourne Health Centre

Abstract: N/A

Date: 2006

Funder: Ontario HIV/AIDS Treatment Network (OHTN)

Reference: http://www.ohtn.on.ca/Pages/Funding/Results-All.aspx

Topic: access to services; Trans populations; mental health

Project R36

Risking it: examining the experiences of gay/bi/queer transmen and HIV/AIDS

Principal investigator: Broden Giambrone, University of Toronto

Abstract: N/A

Date: 2009

Funder: Social Sciences and Humanities Research Council (SSHRC) – Canada Graduate Scholarships Program – Masters Scholarships

Reference: http://www.outil.ost.uqam.ca/CRSH/Detail.aspx?Cle=76935&Langue=2

Topic: Trans populations

Project R37

Social anxiety as a risk factor for HIV transmission risk behaviour among HIV-seropositive and HIV-seronegative men who have sex with men: mechanisms of action

Principal investigator: Trevor Hart, Ryerson University

Co-investigator: Ted Myers

Abstract: As persons with HIV and AIDS live longer and fuller lives as a result of advances in medical treatment, there is increasing need for systemic research on risk behaviours in HIV-seropositive and HIV-seronegative persons. Guided by previous research documenting associations between social anxiety and unprotected intercourse among samples of adolescent men who have sex with men (MSM) and HIV-positive adult MSM in the United States, this study examines how social anxiety may lead to risky sexual behaviour among adult HIV-positive and HIV-negative MSM in Ontario. Participants will complete brief semi-structured interviews and self-report measures assessing social anxiety, mood problems, alcohol and drug use, attitudes regarding HIV/AIDS, and sexual behaviour. This study will provide information to help […] healthcare providers improve health care and to prevent HIV and AIDS among men who have sex with men and other populations at higher risk for HIV- and AIDS-related problems.

Dates: October 2005 – September 2009

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant

Reference: CIHR Database

Topic: prevention; PHA; mental health; sexual behaviour

Project R38

Sociobehavioural factors related to the HIV and AIDS epidemic within the men who have sex with men population

Principal investigator: Nathan J. Lachowsky, University of Otago (New Zealand)

Abstract: N/A

Date: March 2011

Funder: Canadian Institutes of Health Research (CIHR) – Canadian Graduate Scholarships – Michael Smith Foreign Study Supplement

Source: CIHR database

Project R39

Stigma, place, and unsafe sex: continued explorations with men who use gay Internet cruise sites

Principal investigators: Dave Holmes and Patrick O'Byrne, University of Ottawa

Abstract: In Canada, men who have sex with men (MSM) represent the largest proportion of new HIV infections, and sexual partnerships that are arranged via the Internet are described as contributing to this elevated infection rate. However, a review of the research that correlates the Internet and HIV-transmission revealed that it often excludes the perspective of HIV+MSM. Consequently, many HIV advocacy groups have criticized researchers of further marginalizing an already stigmatized group. In response to this, the first step of this project was to seek the guidance of Ontario's "Poz Prevention Group" in order to diminish these ethical/scientific issues. With such input, and the results of three previous CIHR funded studies in (1) bathhouses, (2) circuit parties and (3) amongst men who meet their sex partners via the Internet, the objective of this project is to qualitatively explore the sequence of desire, place, stigma, and unsafe sex as it relates to HIV+MSM who meet their sex partners via the Internet. This research thus aims to explore this sequence in an effort to gain a better understanding about Internet-based (place), sexual risk-taking (unsafe sex) behaviour of men who are, at times, stigmatized as 'un-masculine' due to their homosexual desires. The importance of this is that it incorporates the psychosocial nature of human sexuality by acknowledging that unsafe sex is not always the outcome of simple decision-making processes that follow the rules of doing what is best for one's health. Qualitative methods will be used to undertake this exploration involving HIV+ MSM who arrange their sexual contacts via the Internet because previous research has correlated HIV transmission and the Internet, but has done so without subsequent in-depth exploration of this link.

Dates: October 2010 – September 2011

Funder: Canadian Institutes of Health Research (CIHR) – Operating Grant – Priority Announcement: HIV/AIDS Bridge Funding – Health Services/Population Health Stream

Reference: CIHR database

Topic: PHA; sexual behaviour; sexual networks

Project R40

Teens Resisting Urban Trans/Homophobia (TRUTH)

Principal investigator: Robb Travers, Wilfrid Laurier University

Co-investigators: Susan Flynn and Heidi H. Newton

Abstract: Toronto, Canada's largest and most diverse city, is home to many newcomers from all corners of the globe. This includes lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals seeking safety and freedom from gender- and sexuality-based forms of oppression. LGBTQ youth are part of Toronto's newcomers, yet their experiences and needs, and the factors that make them vulnerable for HIV infection remain largely unknown.

Methods: Teens Resisting Urban Trans/Homophobia (TRUTH) is a CBR collaborative led by Planned Parenthood Toronto and Wilfrid Laurier University. TRUTH is designed to explore the impact of various forms of social exclusion on LGBTQ youth. Between July 2009 and July 2010 more than 70 LGBTQ youth and 16 service providers took part in focus groups and key informant interviews designed to 1) capture youth's diverse experiences with homo/transphobia, 2) explore the impact of those experiences on their health and emotional well-being, 3) provide a theoretical framework that would contextualize the 'risk factors' identified in a broad body of empirical literature, including HIV vulnerability, and 4) identify strategies/interventions to enhance health and well-being. In this presentation, we draw upon a subset of the data (N= 30) focused specifically on the needs of newcomer LGBTQ youth.

Results: LGBTQ newcomer youth report experiencing homophobia and transphobia in their countries of origin, as well as in Toronto (even though it is often heralded as a "multicultural" haven). Youth also report racism and systemic barriers to accessing much-needed services in Toronto. "Being LGBTQ" in Canada, meant taking on or adopting a western 'gay' identity, which presented inherent risks for HIV, including relative sexual freedom (bathhouses, access to alcohol and drugs, etc.), and language barriers that complicate negotiating sexual encounters. Youth described feeling lonely, with an accompanying need for closeness. For our participants, both of these had the potential to lead to sexual activity with unsafe exchange of bodily fluids.

Conclusions: When viewed within a lens of "intersectionality," our data illuminate the specific and unique forms of HIV vulnerability among newcomer LGBTQ youth in Toronto. Newcomers' preconceptions of a Canadian multicultural haven are superseded by unanticipated new forms of social exclusion. With relevant risk contexts revealed, opportunities for innovative HIV interventions are provided.

Date: 2009

Funder: Ontario HIV/AIDS Treatment Network (2009); CIHR- HIV/AIDS Community-Based Research Program – General – Master's Award (September 2009 – August 2011)

Reference: http://www.ohtn.on.ca/Pages/Funding/Results-All.aspx

Topic: Trans populations; youth; homophobia, stigma and discrimination; mental health; culture

Project R41

The changing HIV/AIDS epidemic: contextual and social structural challenges to sustaining health, safety and well-being

Principal investigator: Ted Myers, HIV Social, Behavioural and Epidemiological Studies Unit, University of Toronto

Abstract: N/A

Date: 2008

Funder: Ontario HIV/AIDS Treatment Network (OHTN)

Reference: http://www.ohtn.on.ca/Pages/Funding/Results-All.aspx

Topic: mental health; social and physical environments

Project R42

The intersection of desire, drugs, and unsafe sexual practices: An ethnographic study of the gay circuit party subculture

Principal investigator: Patrick O'Byrne, University of Ottawa

Abstract: In recent years, gay circuit parties (GCP) have grown in popularity and anecdotal and scientific reports indicate that these parties may have led to an upsurge in crystal meth consumption and a rise in risky sexual practices. As such, it has also been speculated that the GCP could be linked with a large proportion of new HIV infections within the gay community. Yet, when this anecdotal and scientific evidence is used to design public health initiatives for use within these parties, most interventions are disregarded. Furthermore, since current crystal meth rehabilitation programs have a 93% failure rate, it is essential that scientific evidence be collected to create a better understanding of the motivations of users. As illustrated in the preliminary results of a CIHR study by Holmes & Gastaldo (2005/6), a large number of HIV+ and HIV- gay men are aware of the risks of their sexual practices, yet engage nonetheless. This project will try to understand the GCP from the insider perspective by using a qualitative design (ethnography) to identify the motivations of gay men who use drugs and engage in risky sexual practices within the GCP, and to understand the effects of the GCP environment upon drug use and sexual practices.

Dates: January 2007 – September 2008

Funder: Canadian Institutes of Health Research (CIHR) – CIHR III HIV/AIDS & IGH Doctoral Research Award

Reference: CIHR database

Topic: injection drug use; sexual behaviour; social and physical environments

Project R43

The molecular epidemiology of primary HIV infections in MSM of Montreal: is there a role for it in public health?

Principal investigator: John Cox, Research Institute of the McGill University Health Centre

Co-investigators: Michel Alary; Robert Allard; Chris P. Archibald; Gilles Lambert; Pascale Leclerc; Robert S. Remis; and Paul A. Sandstrom

Abstract: Individuals who are newly infected with HIV are more infectious because of high levels of HIV in the blood and semen. These patients are often unaware of their infectious status and may continue the same at-risk sexual behaviours that resulted in infection. In the men who have sex with men (MSM) population, it has been suggested that almost half of new HIV infections may be acquired during this primary HIV infection (PHI) phase and that HIV transmission during PHI helps sustain the HIV epidemic in this population. In this pilot study, we will apply molecular epidemiological methods to link HIV sequences of PHI cases identified during two epidemiological studies of MSM in Montreal from 1996 to 2005 (*Argus* and *Omega Cohort* studies). We will determine the degree of PHI clustering/transmission and examine socio-demographic and behavioural determinants of clustered cases. Demonstrating the utility of this approach and possibly describing PHI clustering in this small sample of cases could justify a larger study on the role of PHI clustering in HIV-positive MSM and other HIV at-risk populations such as injection drug users, street youth and people from endemic countries. If PHI clustering proves to be an important element in sustaining the HIV epidemic, public health prevention programs could focus on improving the rates of diagnosis of individuals during PHI, timely risk reduction counselling and contact tracing, and possibly early treatment with antiretroviral medications.

Dates: April 2006 – March 2007

Funder: Canadian Institutes of Health Research (CIHR) – Pilot Project in HIV/AIDS

Reference: CIHR database

Topic: prevention; access to services; PHA; sexual behaviour; biomedical/clinical

Project R44

Process of taking ownership by community workers of a rapid HIV testing intervention for men who have sex with men in the Montreal area

Principal investigator: Ludivine Veillette-Bourbeau, Université de Montréal

Abstract: N/A

Dates: September 2009 – October 2010

Funder: Canadian Institutes of Health Research (CIHR) – HIV/AIDS Community-Based Research Program – General – Master's Award

Reference: CIHR Database

Topic: testing; capacity building

Project R45

Trans PULSE project: exploring HIV vulnerability in Ontario's trans communities

Principal investigator: Greta Bauer, University of Western Ontario

Co-principal investigator: Robb Travers

Co-investigators: Rebecca Hammond; Michelle J. Hancock-Boyce; Matthias Kaay; Rupert Raj; Kyle A. Scanlon; and Anna Travers

Abstract: HIV does not affect all groups equally. Studies from across North America strongly suggest that trans communities have higher than expected rates of HIV. This is perhaps not surprising considering evidence that many trans people experience violence and discrimination, and are having difficulty accessing the most basic of services. These include employment, health care, and housing. It is critical to consider these broader factors when trying to understand HIV in marginalized groups such as Ontario's trans communities. To address this, members of these communities – with partners from the Ontario HIV Treatment Network, Sherbourne Health Centre, The 519 Community Centre, The University of Western Ontario, and TGStation.com – have formed a community-based research project – The Trans PULSE Project. Trans PULSE will use a mix of qualitative and quantitative methods to provide the richest possible understanding of the ways that social marginalization may produce HIV vulnerability within trans communities and how social factors, such as healthcare access as well as the source and stability of one's income, can affect quality of life for those trans people who live with HIV. This project addresses a significant lack of relevant information, and reflects a desire by community members to see HIV within a broader context of trans lives and experiences. The project is made up of a[n] 8 person Investigators Committee, 5 of whom are trans, who have worked together in identifying research goals, designing the study, and increasing community involvement to ensure that this research is relevant to the needs of trans communities. Community soundings, wherein

trans community members in three different Ontario communities discussed their experiences around health, health care, and HIV risk, have been important in shaping the research.

Dates: April 2007 – March 2010

Funder: Canadian Institutes of Health Research (CIHR) – HIV/AIDS Community-Based Research Program – General – Operating Grant

Reference: CIHR database

Topic: access to services; Trans populations; homophobia, stigma and discrimination

Project R46

Understanding HIV testing, status, condom use and other risky behaviours of First Nations two-spirited men and women from a sociobehavioural perspective using sexual attitudes and sexual scripts

Principal investigator: Nathan J. Lachowsky, University of Guelph

Abstract: HIV/AIDS is a major global health issue that has disproportionately affected the Canadian population (58,000 people living with HIV/AIDS in 2005, a 16% increase from 2002). Social, economic and behavioural factors have been attributed to the higher rates in certain populations. Although First Nations people represent 3.3% of the Canadian people, they have disproportionate rates of HIV infections (6%-12% of new infections annually). Although the majority of First Nations people recognize that HIV/AIDS is a serious problem in Canada, the infection rates continue to rise. The majority of HIV/AIDS cases (58%) and new infections (40%) are seen in Canada's men who have sex with men category. It is estimated that approximately 30% of individuals who are HIV positive are unaware of their status. First Nations people use the term "two-spirited" as the label for mixed gender individuals who would otherwise be included in the umbrella term "queer." Research on two-spirited individuals is limited and underrepresented, particularly in the health field. It is important to understand differences in perception, attitudes and roles between First Nations and non-First Nations groups particularly with respect to sexual practice and sexual risk. The proposed exploratory study will investigate issues of HIV/AIDS in two-spirited First Nations populations compared with attitudes and practices in non-First Nations groups. It will comprise both quantitative and qualitative analysis of the sociobehavioural attitudes and activities. Rates of HIV testing, status, condom use and other risky behaviour will be collected and compared in parallel with qualitative thematic analysis pertaining to sexual attitudes and scripts.

Dates: September 2010 – August 2011

Funder: Canadian Institutes of Health Research (CIHR) Master's Award – Frederick Banting and Charles Best Canada Graduate Scholarship

Reference: CIHR database

Topic: testing; Aboriginal populations; sexual behaviour

Project R47

Unsafe sexual practices in public spaces: An ethnographic study of bareback sex in gay bath houses

Principal investigator: Dave Holmes, School of Nursing, University of Ottawa

Co-investigator: Denise Gastaldo

Abstract: While unsafe sex has been reported since the beginning of the HIV epidemic, the underlying assumption has been that most gay and bisexual men do not seek to intentionally have unprotected anal sex. Results of a recent qualitative investigation (Holmes, 2003) proves that voluntary unprotected anal intercourse (VUAI) among HIV + and HIV negative gay and bisexual men occurs frequently in public spaces such as bath houses. According to some non-scientific journal articles, gay and bisexual men practice VUAI for various reasons: increase in sexual pleasure, a feeling of true connection and intimacy with one's partner, sexual arousal at the thought of transgressing recommendations from public health organizations and HIV prevention campaigns, symbolic bonding through the exchange of semen between partners and finally, new treatments in the battle against AIDS (Scarce, 1998). The actual (epidemiological) understanding of unsafe sexual practices does not take into account several socio-cultural and psychological dimensions that we would like to explore from an ethnographic perspective. It is our contention that this scholarship, though helpful and somewhat illuminative, obfuscates the most essential component powering the practice of bareback sex. A better understanding of motivations as they pertain to VUAI and of representation of risk behind the practice of VUAI by gay and bisexual men frequenting bath houses is necessary in order to lead to the implementation of healthcare providers interventions further adapted to the needs of this population.

Dates: April 2004 – March 2006

Funder: Canadian Institutes of Health Research (CIHR)

Reference: CIHR database Operating Grant – Priority Announcement: HIV/AIDS Research Initiative – Health Services/Population Health Stream

Topic: prevention; sexual behaviour; social and physical environments;

Project R48

Willingness of men who have sex with men (MSM) and injection drug users (IDUs), both HIV-ve and HIV+ve, to take part in a vaccine preparedness study (VPS) and a hypothetical vaccine study

Principal investigator: Shayesta Dhalla, University of British Columbia

Abstract: The HIV acquisition rate in MSM and IDUs in B.C. is low by international standards, but generally higher than other rates in North America. It is high enough to allow for a vaccine study. A VPS is necessary prior to a vaccine study. In our VPS, we will look at MSM and IDUs in B.C., both HIV-ve and HIV+ve. After obtaining informed consent, differences between refusers and non-refusers of a VPS will be examined. Sociodemographic variables analyzed will be age; gender; race/ethnicity, use of needle-exchange programs and safe injection sites, sharing needles, compensation for IDUs, prostitution, receptive anal sex with HIV+ve/unknown status partner, >5 partners (all in last 6 mos). Clinical variables will include CD4 count, viral load, number of injections, and HIV antibody status. We will also assess willingness to participate in a hypothetical vaccine study. Follow-up will take place at 6 and 12 months. This will identify people who want to be in a VPS and vaccine study who follow up, people who don't want a vaccine but follow up, people who refuse to follow up, and people who change their minds. Also, we will determine whether enough people would enrol in a vaccine study, so that the potential indirect HIV risk would be less to the rest of the population.

Dates: September 2005 – August 2008

Funder: Canadian Institutes of Health Research (CIHR) – Doctoral Research Award Area of Health Services/Pop. Heath HIV/AIDS Research

Reference: CIHR database

Topic: prevention; injection drug use; PHA; sexual behaviour

APPENDIX C – CURRENT RESPONSE TO HIV/AIDS AMONG GAY, BISEXUAL, TWO-SPIRIT, AND OTHER MEN WHO HAVE SEX WITH MEN (MSM)

The following information has been gathered from the Federal/Provincial/Territorial Advisory Committee on AIDS (F/P/T AIDS); the Public Health Agency of Canada (PHAC), including the Regional HIV/AIDS Network's (RHAN) list of nationally funded programs; and the websites of Toronto Public Health and Ottawa Public Health.

NATIONAL AND PROVINCIAL STRATEGIES ADDRESSING GAY MEN AND OTHER MSM

NATIONAL

There is no specific national strategy targeting HIV/AIDS among gay men and other MSM. However, the *Federal Initiative to Address HIV/AIDS in Canada* identifies gay men as one of eight key populations at risk of, or disproportionately affected by, HIV/AIDS. The initiative was developed as the Government of Canada's response to *Leading Together: Canada Takes Action on HIV/AIDS*, a stakeholder-led document outlining a coordinated nationwide approach to HIV/AIDS in Canada. *Leading Together* highlights the importance of community involvement in the response, as well as the need for culture, gender and age-appropriate programs and services.

PROVINCIAL

Atlantic

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in any of the Atlantic Provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick). However, provincial-level strategies to address HIV/AIDS exist in two of the provinces:

"*Acceptance and Action" Prince Edward Island HIV/AIDS Strategy* was developed in the 1990s and has not been updated.

Nova Scotia's Strategy on HIV/AIDS identifies men who have sex with men as one population at particular risk of HIV infection; however, no specific activities are identified in the strategy to address this population.

http://www.gov.ns.ca/health/reports/pubs/HIV_Aids_strategy.pdf

Quebec

Following the *Cadre de référence pour la prévention de la transmission de l'infection au VIH chez les hommes ayant des relations sexuelles avec d'autres hommes* [framework reference for the prevention of HIV infection in men who have intercourse with men] produced in 1999 and the publication of the *Quatrième rapport national sur l'état de santé de la population du Québec – L'épidémie silencieuse : les infections transmissibles sexuellement et par le sang* [fourth national report on the health of Quebec's population – The silent epidemic: sexually-transmitted and blood-borne infections], a document was published outlining the general state of MSM and actions to reinforce the prevention of HIV and other STBBI among this population.

Ontario

A HIV/AIDS Strategy for Ontario to 2008, which is currently being renewed, includes a call to integrate a social determinants of health perspective into work with HIV-positive and HIV-negative gay men. The *Strategy* also calls for the creation of a provincial strategy to guide the ongoing development of programs tailored to gay men, resulting in the development of the Gay Men's Sexual Health Alliance (GMSH).

Manitoba

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in Manitoba. However, Manitoba Health and Healthy Living, Seniors and Consumer Affairs are co-leading the development process of a comprehensive, coordinated and evidence-based provincial sexually transmitted blood borne infections (STBBIs) strategy for 2012 – 2017. The province-wide strategic approach integrates HIV into the overall STBBI prevention, treatment and surveillance strategy to address high-risk and vulnerable population groups including gay and other MSM. The strategy's participatory development process has been a result of key collaborations between provincial, regional, federal and community partners and stakeholders. The strategy will include Chlamydia, gonorrhoea, syphilis, hepatitis B, hepatitis C, HPV and HIV. The updated strategy is intended to create a more coordinated provincial response to reduce the acquisition and transmission of STBBIs in Manitoba.

Saskatchewan

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in *Saskatchewan. However, Saskatchewan's HIV Strategy 2010 – 2014* identifies men who have sex with men as a population at particular risk of HIV. One recommended activity under the Community Leadership and Engagement stream is to create peer networks of persons living with HIV among a number of affected populations, included two-spirit and other men who have sex with men.

http://www.health.gov.sk.ca/hiv-strategy-2010-2014

Alberta

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in Alberta. However, the *Alberta Sexually Transmitted Infections (STI) and Blood Borne Pathogens (BBP) Strategy and Action Plan 2011-2016* identifies gay men and other MSM as one population at particular risk of HIV infection in Alberta. Stabilizing the rate of new HIV cases among this population by the year 2016 is one target of the action plan.

http://www.health.alberta.ca/documents/STI-BBP-Plan-2011.pdf

British Columbia

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in British Columbia. However, the strategy *Priorities for Action in Managing the Epidemics: HIV/AIDS in BC, 2003 – 2007* included an objective to reduce by 50% the incidence of HIV infections among at-risk populations, including gay men and other MSM, within the five years of the strategy (which can be found at: http://www.health.gov.bc.ca/library/publications/annualrpts/pfa/hivpriorities.pdf). Gay men and other MSM remain a key target group for British Columbia's current HIV pilot project, Seek and Treat to Optimally Prevent HIV (STOP HIV). STOP HIV aims to better reach and engage hard-to-reach and vulnerable groups in Vancouver and Prince George in HIV prevention, screening, diagnosis, treatment and care. In addition, several regional strategies identify gay men and other MSM as a population at particular risk of HIV:

Vancouver Coastal Health: *Vancouver Community HIV/AIDS Strategic Plan 2007 – 2012* identifies increasing HIV prevention activities for gay men and other MSM as one of five strategic priorities, as most of the region's new reported HIV infections occur in this population.

Vancouver Island Health Authority: *Closing the Gap – Integrated HIV/AIDS and Hepatitis C Strategic Directions for Vancouver Island Health Authority, 2006 – 07 – 2008 – 09* identifies gay men and other MSM as a priority population at particular risk of HIV and hepatitis C.

http://www.viha.ca/NR/rdonlyres/90755627-1758-4A5C-A446-16D26CB680C7/0/ClosingtheGapJuly252006.pdf

Interior Health: *Interior Health's Action Plan for Blood-Borne Pathogens, 2006 – 2009 – Embracing a Healthy Future* identifies gay men and other MSM as a population at particular risk of HIV infection.

http://www.interiorhealth.ca/uploadedFiles/Information/Reports/Reviews,_Backgrounders_and_Planning_Documents/InteriorHealthActionPlanforBloodBornePathogens06to09.pdf

Provincial Health Services Authority: *Collaborating for Action – Provincial Health Services Authority HIV/AIDS Strategic Framework* identifies gay men and other MSM as a population at particular risk of HIV infection.

http://www.phsa.ca/NR/rdonlyres/B7E903CF-EAC9-4AF9-AA7C-067DA752308E/0/COLLABORATINGFORACTIONFINAL1.pdf

North

No strategy specifically focused on HIV/AIDS among gay men and other MSM was identified in Nunavut, the Northwest Territories or Yukon Territory.

Nunavut: No specific HIV/AIDS strategy was identified.

Northwest Territories: The *Sexually Transmitted Infections: Strategic Directions Document* does not mention gay or other MSM. http://www.hlthss.gov.nt.ca/pdf/reports/diseases_and_conditions/2005/english/nwt_sti_strategic_directions.pdf

Yukon: No specific HIV/AIDS strategy was identified.

POPULATION-SPECIFIC NETWORKS, COALITIONS AND ADVISORY BODIES

Atlantic

No networks, coalitions or advisory bodies targeting gay men and other MSM were identified in the Atlantic Provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick).

Quebec

COCQ-Sida, Quebec's network of AIDS organizations has several committees including one focused on Gay Men and MSM. The role of these committees is to identify training and knowledge transfer projects, as well as intervention and communication tools, in accordance with the needs of the stakeholders working with these communities. The committees work upstream to create and identify innovative intervention strategies that take into account new knowledge in the field. The committees help COCQ-Sida maintain contact with the field and stakeholders, as well as network by pooling their experience. Both committees take into account the specific experiences of the individuals in these communities as well as the unique challenges they face. Their work involves both prevention and support to people living with HIV.

Ontario

The *Gay Men's Sexual Health Alliance* (GMSH) is a provincial coalition of gay men and their allies from community-based AIDS service organizations, public health, HIV researchers, policy makers and other community members. It undertakes coordination and communication and provides strategy/outreach workers housed in community-based AIDS organizations across Ontario. The GMSH aims to foster a systematic, evidence-informed, skilled, consistent and effective response to the sexual health needs of Ontario's diverse communities of gay/bi/men who have sex with men (MSM) with and at risk of HIV and other sexually transmitted infections (STIs). It aims to reduce the transmission of HIV and other STIs, and to improve the overall health and well-being, of gay, bisexual and other MSM. GMSH's strategy fosters an approach to sexual health work that is gay-affirming, sex-positive and that integrates risk and harm reduction approaches. The GMSH has several working groups (described in Chapter 6), including: a provincial advisory body; Gay and Bisexual Men's HIV Testing Campaign Working Group; Gay/Bi/Queer Trans Men's Working Group; Poz Prevention Working Group; and working groups for specific time-limited tasks, including a Campaign Working Group and GMSH Summit Planning Committee.

Groupe de travail pour hommes gais, bisexuels et HARSAH francophones: This working group is responsible for providing support on the development of strategies aimed at improving services for Francophone gay men, bisexual and other MSM living with HIV in Ontario.

The AIDS Bureau at the Ontario Ministry of Health and Long-Term Care coordinates a series of policy processes to address HIV and other sexual health issues in gay men's lives including a gay men's testing campaign, work to advance screening for anal dysplasia and anal cancer, and work to address syphilis in gay men in the province.

Manitoba

The GLBTT (Gay, Lesbian, Bisexual, Transgender, Two-spirited) Coalition is composed of a number of community organizations, has extensive experience connecting and working with gay, bisexual and other men who have sex with men through outreach and social marketing activities. They have recently received funding to develop and produce education and awareness resources designed to reduce new syphilis infections, including a broader message regarding overall STI/HIV prevention and education.

Saskatchewan
No networks, coalitions or advisory bodies targeting gay men and other MSM were identified.

Alberta
No networks, coalitions or advisory bodies targeting gay men and other MSM were identified.

British Columbia
No networks, coalitions or advisory bodies targeting gay men and other MSM were identified.

An annual Gay Men's Health Summit is hosted by the Community-Based Research Centre in Vancouver, British Columbia. The summit brings together community members, researchers and all levels of government from the province and across Canada to improve the health and wellness of gay men.

North
No networks, coalitions or advisory bodies targeting gay men and other MSM were identified.

ORGANIZATIONS INVOLVED IN THE DELIVERY OF PROGRAMS AND TIME-LIMITED PROJECTS (2006 – 2010) ADDRESSING HIV/AIDS AMONG GAY MEN AND OTHER MSM

NATIONAL

Canadian AIDS Society (CAS):
Project G1: The Gaynet Youth Forum is an approved work-plan activity under the Canadian AIDS Society's National HIV/AIDS Voluntary Sector Response Fund project. In collaboration with the Canadian Federation of Students, the objective is to identify the process by which to establish a pan-Canadian student network.

www.cdnaids.ca

CATIE:
Project G2: The Gay Men's Sexual Health Project aims to facilitate the creation of a national platform for service providers to share ideas, information, experiences and best practices particular to the HIV, and the sexual and other health needs of gay, bisexual and other men who have sex with men.

www.catie.ca

ATLANTIC

AIDS Coalition of Cape Breton:
Project G3: Offers workshops for gay men, including workshops on homophobia and queer health.

Project G4: Making Queer Youth Matter aims to make educational training available to youth service providers on topics such as anti-transphobia and homophobia, suicide intervention, and small group facilitation training.

Project G5: Sydney Transgender Access, Resource & Support (S.T.A.R.S.) a supportive environment for all trans people.

http://accb.ns.ca/

AIDS Coalition of Nova Scotia:
Project G6: Offers educational services, including information on mental wellness, stress management and smoking cessation, healthy weight management, nutrition and exercise, assessing disease prevention, hepatitis A and B vaccinations, referrals to GLBTI-friendly health professionals.

Project G7: Specific program targeting HIV-positive gay men.

Project G8: As part of its community development initiatives, the AIDS Coalition of Nova Scotia offers programs to increase awareness and education on HIV/AIDS among organizations, the community, and service providers. ACNS offers, among other topics, workshops on gay men's health.

Project G9: PrideHealth, in partnership with the AIDS Coalition of Nova Scotia, provides information on mental wellness, stress management and smoking cessation, healthy weight management, nutrition, exercise, disease prevention, hepatitis A and B vaccinations, and referrals to GLBTI-friendly health professionals.

http://acns.ns.ca/

AIDS Committee of Newfoundland and Labrador:
Project G10: The GUYZ Project aims to increase HIV, HCV and STI knowledge and awareness among young gay men and service providers in the St. John's area.

http://www.acnl.net/

AIDS Moncton:

Project G11: One-on-one support and referral service to other professionals/agencies and support groups.

Project G12: Public education workshops on homophobia, sexual orientation, and on how to create safe environments for GLBTTQ youth. http://www.sida-aidsmoncton.com/

New Brunswick Public Health

Project G13: Safe sex messaging social marketing campaign on syphilis targeting MSM and enhanced access to testing for syphilis (recommending HIV testing also).

QUEBEC

AIDS Community Care Montreal (ACCM):

Project G14: Kontak is a project that provides gay and other MSM with outreach materials which address risk-reduction strategies.

Project G15: ATOMc is a peer-based strategy to promote HIV and STI testing among gay and other MSM.

http://accmontreal.org/

Bureau régional d'action Sida Outaouais (BRAS):

Project G16: Training of stakeholders from different backgrounds on topics including demystifying homosexuality, street work, etc.

Project G17: The Jeunesse Idem project aims to meet the needs of young people who are struggling to accept their sexual orientation. Services include: workshops, group meetings; individual meetings; and support, assistance and information via telephone and Internet.

http://www.jeunesseidem.com/qui-sommes-nous/services.html

C.A.C.T.U.S. Montréal:

Project G18: Support groups and activities offered to and organized by transgender people.

Project G19: Outreach to sex workers by other sex workers who offer support, prevention material and referrals to other services.

Project G20: Education and information provision to health and social service professionals regarding transsexuality.

Project G21: Information about the medical, social and economical aspects of the transition process (male to female and female to male).

http://www.cactusmontreal.org/en/astteq.html

Coalition Sida des Sourds du Québec:

Project G22: Information on sexual health and prevention for deaf men who have sex with men.

http://www.cssq.org/francais/prevention-prog-fr.html

CSSS du Grand Littoral:

Project G23: "Parc des Chutes" – Weekly outreach to MSM that includes STI screening, prevention, partner support, individual screening, counselling/health promotion, and opportunity to receive counselling for other issues: nicotine addiction, drug use, and mental health.

IRIS Estrie:

Project G24: Projet de Parrainage – through peer-led support, this project aims to demystify homosexuality, address vulnerability and risk, and increase awareness of HIV infection.

http://iris-estrie.com/

Maison Plein Cœur:

Project G25: Positive Group Support is a prevention project addressing blood-borne and sexually transmitted infections among HIV-positive gay and other MSM.

http://www.maisonpleincoeur.org/service.php?s=&lang=e

MIELS Promotion de la santé:

Project G26: The "Latex wall to wall" program provides condoms and information on HIV and other STIs at establishments frequented by gay men. An extension of this project is carried out in the summer through the "Parks Project."

Project G27: The Phoenix workshop provides sexual risk-reduction workshops for adult gay men and other MSM.

Project G28: Project aimed at providing youth with basic training on HIV/AIDS, STIs and risk behaviours. Other topics include: contraception, demystification of homosexuality, prevention of violence in romantic relationships and sex work.

Project G29: PRISM – provides referral services and peer-facilitated support groups.

http://www.miels.org/vous-etes-seronegatif/projets-jeunesse

Le Miens:

Project G30: The program *Mascu-lien* offers information on HIV infection, including methods of transmission and risk factors. It also aims to educate on safe sex practices and to promote attitudes of solidarity and compassion vis-à-vis peers.

http://www.lemiens.com/education.php

Mouvement d'Aide et d'INformation Sida (MAINS):

Project G31: Park worker for men who have sex and emotional relationships with men. The main duty of park workers is to carry out prevention and provide information on HIV/AIDS. The work is carried out in environments where men who have sexual and romantic relationships with men are found in Rimouski. The park workers address issues of STIs, homosexuality, couple relationships, relationships and any other topics important in the lives of men who have sexual and romantic relationships with men.

http://www.mainsbsl.qc.ca/nouveautes.php?id=40

Le Néo:

Project G32: Education on homophobia, sexual orientation and sexual health aimed at high schools in order to improve the quality of life for queer youth.

http://www.le-neo.com/orientation.html

RÉZO:

Project G33: Provides regional, provincial and national promotional activities and information kiosks aimed at target groups and/or the general public.

Project G34: "Programme travailleurs du sexe" – aims to improve the living conditions of sex workers and offers information services, support, and referral services.

Project G35: Support groups for gay men to reflect on their experiences. Other support services include: consulting services, referrals, guidance and information on all matters relating to health and well-being of gay and bisexual men offered by qualified personnel. This support is offered on the premises of the agency, by phone, online or in different social settings (e.g., bars, saunas, etc.).

Project G36: Offers information sessions on HIV and other STIs, and vaccines for hepatitis A and B are provided at venues frequented by gay and bisexual men (e.g., bars, saunas, peep shows, sex clubs, etc.) in collaboration with network partners in health (Health and Social Services Centres and medical clinics).

Project G37: "SPOT" is a research project offering anonymous rapid HIV testing for gay and bisexual men in Montréal.

Project G38: "L'enquête « Êtes-vous satisfait?" is a survey to understand health issues that impact gay men and other MSM.

Project G39: Distribution of prevention materials in different social environments and commercial establishments in the community.

Project G40: Internet et Intervention en ligne – a website for young men having sex with other men seeking information and services on gay men's health, safer sex practices, STIs and HIV/AIDS.

www.rezosante.org

Sidaction Trois-Rivières:

Project G41: Intervention in parks and other social spaces to provide gay men and other MSM with kits, condoms and related information to prevent transmission of HIV, hepatitis and other STIs.

www.sidavielaval.org

Sida-Vie Laval:

Project G42: Projet Apollon – outreach activities at raves, parks, bathhouses.

http://www.vih.org/reseau/sida-vie-laval

ONTARIO

2-Spirited People of the 1st Nations:

Project G43: Counselling (pre and post-test for HIV), individual, family, friend/partners, and advocacy.

Project G44: HIV/AIDS education and prevention.

www.2spirits.com

The 519 Church Street Community Centre:

Project G45: "Getting Primed" is a training project for HIV-prevention workers focusing on the unique needs of transmen who have sex with men. The group created a sexual health resource for transmen called "Primed: The Back Pocket Guide for Transmen and the Men Who Dig Them" In collaboration with the Gay Men's Sexual Health Alliance.

www.the519.org/programsservices/transprograms/gettingprimed

Access AIDS Network:

Project G46: Offers a Healthy Sexuality Program targeting MSM and youth. Other key populations are involved. Activities include: bilingual safer sex workshops to MSM and LGBT youth, service providers, and primary and secondary school teachers; volunteer program to promote safer sex information in Internet channels.

www.accessaidsnetwork.com/programs/healthy-sexuality

African and Caribbean Council on HIV/AIDS in Ontario (ACCHO):

Project G47: Provides pamphlets, brochures and publications on Black gay men.

www.accho.ca

Africans in Partnership Against AIDS:

Project G48: Gay Men's Outreach Program – conducts outreach in gay bars, clubs and parties, bathhouses, online and in other spaces where African gay, bisexual and straight-identified men who have sex with other men congregate.
http://www.apaa.ca/index.php?option=com_content&view=article&id=111:community-outreach&catid=47:community&Itemid=70

AIDS Committee of Cambridge, Kitchener, Waterloo & Area/Community Education:

Project G49: Offers workshops on homophobia to the community, including at schools.

Project G50: Provides a Gay, Lesbian, Bisexual, Transgender & Queer/Questioning (GLBTQ) youth group.

www.acckwa.com/en/?page_id=76

AIDS Committee of Durham Region:

Project G51: Outreach within the community at local colleges, clubs and social events, as well as at AIDS Committee sponsored events.

Project G52: Information on coming out, tattooing and body piercing, substance abuse, and STIs, including HIV/AIDS.

http://www.aidsdurham.com/gay_health.html

AIDS Committee of Guelph and Wellington County/Wellington and Grey Bruce Rural:

Project G53: GBTQ Men's Network offers drop-in sessions for GBTQ men over 19 years of age. www.aidsguelph.org/harm-reductionoutreach1

AIDS Committee of London:

Project G54: "Safer sex chat" service that provides safer sex information, support, referrals and Q & As with MSM who chat online in London chat rooms on gay.com and squirt.org.

Project G55: Bathhouse outreach for MSM.

Project G56: Staff and volunteers provide a support group once a week for gay/lesbian/bisexual/transgendered/two-spirited youth in London.

Project G57: Safer sex and HIV/AIDS education and information.

www.aidslondon.com

AIDS Committee of Ottawa (ACO):

Project G58: The Gay Men's Health and Wellness Project – As part of the Gay Men's Wellness Initiative (GMWI) in Ottawa, ACO conducts various outreach activities by promoting gay men's health and wellness in local bathhouses, bars, websites and public spaces where gay men and other MSM meet, and at special events.

www.aco-cso.ca/preventionoutreach.htm

AIDS Committee of Simcoe County:

Project G59: Theatre-based education and prevention for the people in Simcoe County. Topics include homophobia and heterosexism.

Project G60: *GOSSIP* is a newsletter providing education on health issues, current trends, events calendars and information links of particular interest to the gay community.

http://www.acsc.ca/gay-man-msm-info.php

AIDS Committee of Toronto (ACT):

Project G61: Portuguese Speaking Community Services – The men's peer outreach prevention program targets community venues and events as well as bathhouses. Safer sex materials are distributed to more than 30 community venues. The case management program supports Portuguese-speaking people living with HIV/AIDS.

Project G62: Gay Men's Community Education provides workshops and discussion groups on resilience and gay men's health and develops resources.

Project G63: Gay Men's Outreach provides peer-outreach services online and in bars, bathhouses, and community events. More than 200,000 condoms and lubes are distributed annually.

Project G64: Gay Youth and Gay Men's Harm Reduction provides harm reduction and safer sex outreach online, in bars, clubs, and at special events. Online and print resources are also developed.

Project G65: TowelTalk provides professional counselling services in Toronto bathhouses and follow-up support.

Project G66: Totally OUTright provides sexual health community-leadership course for young gay men aged 18 to 26.

Project G67: SPUNK! Motivational interviewing and group intervention, which supports substance-using gay men to make changes in use patterns and promote increased adoption of safer sex practices.

Project G68: GPS (Gay Poz Sex) is a confidential sexual health discussion group for HIV-positive gay men.

Project G69: Support groups for gay men living with HIV.

Project G70: Men's Wellness Retreat provides opportunities for people living with HIV/AIDS to enjoy a weekend of relaxation and capacity building.

http://www.actoronto.org/home.nsf/pages/gaymen

AIDS Committee of Windsor:

Project G71: Poz Prevention Program provides peer-led and one-on-one sessions which focus on strategies to reduce risk-taking behaviour, availability of coordinated services and support, and basic questions regarding transmission and prevention. Also provides workshops which focus on various areas of positive prevention, promoting safe sex practices, and improving sexual health and well-being.

http://www.aidswindsor.org/cms/gay-mens-sexual-health-program/ACW-Information/Services/gay-mens-sexual-health-gmsh-program/menu-id-142.html

AIDS Thunder Bay:

Project G72: Educational resources to reduce stigma and discrimination around HIV/AIDS and related issues on sexual orientation through the provision of workshops and presentations.

http://www.aidsthunderbay.org/index.php?option=com_content&view=article&id=72&Itemid=79

Alliance for South Asian AIDS Prevention:

Project G73: "Dosti" is a Toronto-based website for South Asian men to chat, cruise and connect with gay, bisexual, transgendered or other men who have sex with men. The site allows users to post questions regarding safer sex and sexuality.

Project G74: "Snehittan" is a social and support group for Tamil, Sinhala, Malayalam, Telugu and Kannada men who are gay, bisexual, transgendered or other MSM.

http://www.asaap.ca/docs/support_groups.htm

Asian Community AIDS Services:

Project G75: Offers a comprehensive MSM program with outreach, education, pre- and post-HIV testing counselling services to Asian gay men.

Project G76: As part of its general youth program, ACAS provides supportive social spaces for lesbian, intersex, bisexual, transgender, transsexual, gay, queer and questioning East and Southeast Asian youth through the Queer Asian Youth program (QAY).

http://www.acas.org/english/msm.php

Black Coalition for AIDS Prevention (Black CAP):

Project G77: "THINK" – a social marketing campaign in which BMSM are engaged by developing resources, such as condom wallets, posters and postcards, and a health promotion website.

Project G78: Conducts HIV/AIDS and sexual health outreach geared towards Black gay, bisexual and straight-identified men who have sex with men (MSM) within Toronto's Black communities.

Project G79: "Dealing With Being Different" – a resource for Black LGBT youth and their parents to help Black lesbian, gay, bisexual, transgender, queer and questioning (LGBTQ) with the "coming out" process.

Project G80: In partnership with a number of community partners and agencies, BlackCAP developed a designated chapter of PFLAG Canada called Black Families and Friends (BFF), a collective of agencies and community members whose focus is to specifically address the needs of Black LGBT youth and their families.

Project G81: LGBTQ settlement program – offers one-on-one counselling for LGBTQ newcomers and orientation sessions and training on topics including: housing, human rights, and entering the labour force.

Project G82: Black CAP, in collaboration with the Gay Men's Sexual Health Alliance and other community partners, created the website www.n2ontario.ca, a resource for gay, bisexual, and other MSM who are new to Canada to assist them in avoiding HIV during the period when they are settling in the country.

www.black-cap.com

Centre for Spanish Speaking Peoples (CSSP):

Project G83: Offers "Mano en Mano Peer Educator HIV/AIDS Prevention Training Course," which provides culturally and linguistically appropriate information needed to reduce risks of infection among Spanish-speaking newcomer men who have sex with men. This project provides three culturally appropriate, peer educator HIV/AIDS training courses in Spanish.

http://www.spanishservices.org/

Gay Men's Sexual Health Alliance (GMSH):

Project G84: Development of a legal guidebook gay men living with HIV entitled Positively Healthy, in partnership with Toronto People With AIDS Foundation and the Ontario HIV/AIDS Legal Clinic.

Project G85: Development of a provider manual for people providing sexual health services to gay men living with HIV, in partnership with Toronto People With AIDS Foundation and the Ontario HIV/AIDS Legal Clinic.

Gay Zone Gaie:

Project G86: Screening and treatments for STIs, HIV rapid and anonymous testing.

Project G87: A group for queer youth.
http://www.aco-cso.ca/gayzonegaie/

Hamilton AIDS Network:

Project G88: Men for Men – provides sexual health education and other resources to enhance the lives of men who have sex with men by reinforcing self-esteem and personal empowerment.

http://www.aidsnetwork.ca/education_msm.php

Hassle Free Clinic:

Project G89: Bathhouse Outreach Project – on-site, anonymous testing for HIV and counselling.

Project G90: HIV testing with pre- and post-counselling.

Project G91: Provides general men's health education and referral services.

Project G92: Offers support counselling services on issues related to HIV/AIDS and sexuality.

http://www.hasslefreeclinic.org/ProgramsMen.php

HIV/AIDS Regional Services:

Project G93: Education and training sessions on topics related to gay men and other MSM, including homophobia, stigma and discrimination. http://hars.ca

HIV & AIDS Legal Clinic Ontario (HALCO):

Project G94: Created the resource document *HIV Disclosure: A Legal Guide for Gay Men in Canada*, in collaboration with the Gay Men's Sexual Health Alliance.
http://www.halco.org/

J. D. Griffin Adolescent Centre:

Project G95: sprOUT Sexual Health Info Project (SHIP) – Provides HIV/STI info to LGBT youth with developmental disabilities. http://www.griffin-centre.org/supportus.php

Malvern Family Resource Centre:

Project G96: Photograph Your Thoughts (PYT) – Provides HIV/STI/sexual health workshops to gay/bi/MSM youth. http://www.mfrc.org/Programs/youth.html

Peel HIV/AIDS Network:

Project G97: Anti-homophobia and queer-positive training and workshops on HIV for gay men and service providers. Offers positive prevention to HIV-positive gay men, HIV testing referrals and treatment option information.

Project G98: Outreach to LGBT communities at events such as Peel Pride and Queer It Up.

Project G99: Offers educational resources and community development activities with service providers on MSM-specific outreach activities. www.phan.ca

Peterborough AIDS Resource Network:

Project G100: Queer youth drop-in sessions twice a month.

Project G101: HIV Education Program – Building Our Community Response – The objectives of this project are as follows: to address the knowledge, attitudes and behaviours of gay, bisexual, and MSM to reduce their risk for HIV infection; and to decrease homophobia and other barriers to reduce risk of HIV in young gay/bisexual men. http://www.parn.ca/events.htm

Pink Triangle Services:

Project G102: Health promotion (brochures) on HIV/AIDS for gay men and other MSM. http://www.pinktriangle.org/Eng/services.html

Toronto People with AIDS Foundation:

Project G103: The PHA Engagement in POZ Prevention for Gay Men program utilizes staff and peer educators to provide peer consultations, service provider training, and social group discussion around sexual health and poz prevention.

http://www.pwatoronto.org/english/poz-prevention.php

Toronto Public Health:

In addition to providing significant funding to various community agencies, Toronto Public Health offers the following programs:

Project G104: Education on issues related to sexually transmitted infections through promotion of an online partner notification website, called InSPOT.

Project G105: M2Men is a free iPhone application and text messaging service from Toronto Public Health is now available as a health resource for gay men and other MSM. M2Men helps men access a wide range of information about sexual health and locate health resources in Toronto.

www.toronto.ca/health

MANITOBA

No projects targeting gay men and other MSM were identified.

SASKATCHEWAN

Avenue Community Centre for Gender and Sexual Diversity:

Project G106: Objectives of the Revitalizing HIV Prevention for Gay Men project include developing safer sex educational material, discussing HIV, hepatitis C and other STI prevention and safer sex in the context of the determinants of health, and increasing testing among gay and bisexual men.

www.avenuecommunitycentre.ca

ALBERTA

AIDS Calgary Awareness Association (ACAA):

Project G107: Outreach program, called "HEAT," which provides specific education on HIV/STI prevention and health promotion. http://www.aidscalgary.org/

HIV Network of Edmonton:

Project G108: Undertaking a community research project, called "GuyQuiz", which aims to investigate the sexual culture of men who have sex with men in Edmonton. http://www.hivedmonton.com/

HIV West Yellowhead:

Project G109: Community education workshop on sexual diversity/orientation.

Project G110: Support programs to GLBTQ, called "Out Jasper." http://www.hivwestyellowhead.com

Options Sexual Health Association:

Project G111: Sexual health education to LGBTQ-2QIA and teaches skills to determine personal boundaries and to make healthy decisions within the context of a person's values, beliefs, culture and experience.

Project G112: Counselling or referral services on sexual orientation.

www.optionssexualhealth.ca

BRITISH COLUMBIA

AIDS Network Outreach and Support Society (ANKORS):

Project G113: Transconnect program that provides support and resources for transgender and gender variant people.

www.ankors.bc.ca

AIDS Vancouver:

Project G114: BOYS R Us is a referral and outreach program that provides a supportive drop-in for men and transgender participants who work or used to work in the sex trade. http://www.aidsvancouver.org/

AIDS Vancouver Island:

Project G115: Men's Wellness Program promoting men's wellness and creating spaces for men to talk about being gay, queer, bi or questioning, and how that impacts on their sexual, physical, emotional, psychological and spiritual health and well-being. Peer support groups coordinated by AIDS Vancouver Island exist throughout Vancouver Island. Support group activities include: weekly gay men's group for both HIV-positive and negative men, and intergenerational social and storytelling gathering once a month.

Project G116: Counselling for queer men around sexual challenges and sexual health.

Project G117: Outreach activities.

http://avi.org/

British Columbia Centre for Disease Control

Project G118: iTest is an online screening and laboratory requisition supporting gay men to access STI/HIV testing and results online.

Project G119: Outreach Program is a street nursing program providing outreach and clinic-based STI/HIV screening and referrals to gay men.

Project G120: inSPOT is an online partner notification service for STI/HIV with an approach tailored to gay men.

www.bccdc.ca

Community-based Research Centre (CBRC):

Project G121: Undertaking a Sex Now survey, a provincial research project about gay men's sexual health.

Project G122: Totally Outright: A Sexual Health Leadership Training Program for Young Gay Men.

Project G123: Annual BC Gay Men's Health Summit.

Project G124: Young Gay Investigators Team: Advanced health promotion training for young gay men.
www.cbrc.net/

HIM (Health Initiative for Men):

HIM aims to strengthen gay men's health and well-being and involves and engages gay men to improve the foundations of their physical, sexual, social and mental health through research-based, community-focused, volunteer-driven activities.

Project G125: HIM facilitates groups on various topics, led by volunteers from the community who receive support, training and promotion. The topics are unlimited and vary from physical fitness to writing, yoga, and relationships.

Project 126: Totally Outright is a two-weekend workshop for 18 to 26-year-olds to empower them to consider community service.

Project 127: A volunteer-staffed condom distribution program, which has delivered over 250,000 condoms in two years.

Project 128: HIM operates two Sexual Health Centres, where gay men can access STI and HIV testing (rapid, early and standard HIV tests), sexual health information, peer support, and professional counselling services that are tailored for them. The peer support and professional counselling service is staffed by volunteers from the community who help with a wide range of issues including sex and sexuality, coming out, substance use, health issues, relationships, anxiety, racism, body image, etc.

www.checkhimout.ca

PEERS Vancouver:

Project G129: Hustle: Men on the Move is a male, trans and youth component of PEERS Vancouver, offering outreach, educational, and support programming.

http://www.peersvancouver.com/#!viewstack1=services

Positive Living BC Society (formerly BC Persons with AIDS Society):

Project G130: Peer Navigator program provides support and connection to care for newly diagnosed HIV-positive people (including a significant proportion of gay men). It offers various social activities and programs, including an Outdoorsmen group for gay HIV-positive men who enjoy outdoor activities; monthly dinners and other social events for gay men; and weekly meetings at Average Joe's Café. http://www.positivelivingbc.org/

Vancouver Coastal Health

Project G131: Vancouver Coastal Health STOP Team provides outreach HIV testing, public health follow-up, linkage to HIV care, including outreach nursing at three bathhouses, nursing support to Spectrum Health, a primary care practice with a high volume of gay men.

Project G132: Vancouver Coastal Health PRISM provides additional support to LGBT populations.

Project G133: Vancouver Coastal Health VAMP is a gay focused addictions support program for gay men recovering from addiction to methamphetamine.

Project G134: Vancouver Coastal Health 3 Bridges Community Health Centre is a community health centre providing comprehensive primary care services, including culturally competent care to lesbian, gay, bisexual and trans populations.

YouthCo AIDS Society:

Project G135: Prevention education and HIV support services to youth aged 15-29 (including initiatives specific to young gay men). http://youthco.org

NORTH

No projects targeting gay men and other MSM were identified.