

Rapid Review Response: Transgender Men’s Sexual Health and HIV Risk

Question: What are transgender men’s sexual health and HIV prevention needs, based on a search of literature published since the beginning of 2004?¹

A Note on Language: The language used to describe transgender identity is constantly evolving. (2) We use the term “transmen” to refer to people who were assigned “female” at birth and who have a male gender identity or masculine gender expression. This use of language is consistent with recent publications developed by a community-based researcher and members of the transmen’s community. (1;3) We also use the terms “FTM” and “MTF” where warranted to accurately convey the methodology, results and discussion from a published research study.

The Issue and Why It’s Important

In order to develop evidence-informed programs and interventions that promote healthful sexual lives among transmen in Ontario, it is important to understand the ways in which transmen may be at risk for sexually transmitted infections (STIs), including HIV. It is also important to understand the ways in which the strengths, social structures, and resources within transmen communities can play a role in protecting and promoting their sexual health.

There is very little published research evidence about the sexual health and HIV prevention needs of transmen, in Ontario or elsewhere. And there is very little research evidence documenting HIV rates among transmen. In contrast, there is considerably more research on HIV risk among and the HIV prevention needs of transwomen (MTF). That research indicates that there are numerous biological/physiological, behavioural, social and economic factors that have placed certain groups of transwomen at extremely high risk of HIV.(4)

While significant differences exist between transwomen and transmen and their communities, there are important similarities that beg us to ask whether transmen are also at elevated risk for acquiring STIs, including HIV. Both transwomen and transmen: 1) face social exclusion and marginalization due to the fact that often society and social instructions are hostile to people who do not conform to binary gender categorization (i.e., male vs. female); 2) choose medical and non-medical ways to change their bodies or physical appearance to make them more closely fit their gender identity; and 3) identify with a range of sexual orientations and engage in an array of

¹ The question, “What are transgender men’s HIV prevention needs?” has recently been explored (January 2009) in brief in a published Fact Sheet authored by a group including members of the Gay/Bi/Queer Gay Men’s Working Group, Ontario Men’s Sexual Health Alliance.(1)

sexual behaviours, in a range of circumstances, with people of varying genders and sexual orientations (5). These three factors may influence the sexual health and well-being of transmen, including the risk that some transmen may acquire STIs / HIV infection. Transmen's unique experiences and bodies may also influence their sexual healthfulness and HIV risk.

Key Take Home Messages

- There is very little research about transmen's sexual health, or their rates of HIV and STI infection. Existing research involving relatively small groups of transmen has found low rates of HIV infection. (4;6)
- A systematic review of the HIV prevention needs of transgender people, published in 2008, found five US studies that reported information on rates of HIV among FTM (4):
 - Three studies in which participants self-reported their HIV status found HIV prevalence of 0%.
 - One study where participants self-reported HIV status found HIV prevalence of 3%.
 - In the only study where participants took antibody tests, the HIV prevalence rate among study participants was 2%.
- HIV risk among transmen is not well understood. A number sexual behaviours and sex-related behaviours put transmen at risk of becoming infected with, and transmitting, HIV and other STIs. An important finding from two relatively small studies of transgender people in the Philadelphia and Chicago regions was that transmen were significantly more likely than transwomen to engage in risky sexual behavior. (5;9)
- Contextual factors—individual, interpersonal, and structural/societal factors—may affect the sexual health and HIV risk of transmen. While individual and interpersonal factors have been *identified* and *discussed* in the literature (1;4-10), virtually no *research studies* have been conducted to better understand their impact on the HIV risk for transmen.
- We did not find any published evaluations of HIV prevention interventions specific to transmen. One intervention used a pre-test and two post-test questionnaires (without a control group) to evaluate an intervention delivered to mixed groups of transgender men and women. The intervention appeared effective in improving participants' attitudes toward condom use, safer sex self-efficacy and in reducing sexual risk behaviours. (11)
- Numerous researchers, health care providers, academics, and community members call for more research into the lives and sexual health and HIV prevention needs of transgender people, or specifically of transmen. (1;4-6;9;11-14)

What We Found

To determine the HIV prevention and sexual health needs of transmen, it is important to identify and understand how specific behaviours and underlying factors influence the sexual health and

HIV risk of transmen. Peer reviewed research studies and commentary by experts in the field (both academic and community) provide evidence to inform our understanding.

In our search we found numerous articles that reported on sexual health, HIV prevalence and HIV risk among transgender people but data for transmen and transwomen were not reported separately. For example, a review article includes data from studies involving 207 transgender people (15) and a needs assessment of transgender people in Boston (10) do not provide data separately for transmen and transwomen.

Rates of STIs and HIV among transmen

Historically, the common assumption in the academic and peer-reviewed literature was that transmen were not at risk of becoming infected with HIV, and certainly not at risk to the same extent as transwomen (3;5), because transmen are often assumed to be primarily having sex with nontranswomen (5). Perhaps as a corollary to this, there is very little research about HIV rates among transmen with no published research studies or estimates of the rates of HIV among transmen in Canada (at least based on our searches), and only a small number of studies involving small groups of transmen in various locations in the USA.

A systematic review of the HIV prevention needs of transgender people, published in 2008, found five US studies that reported information on rates of HIV among FTM (4):

- Three studies in which participants self-reported their HIV status found HIV prevalence of 0%.
- One study where participants self-reported HIV status found HIV prevalence of 3%.
- In the only study where participants took antibody tests, the HIV prevalence rate among study participants was 2%.

In addition, the 2008 systematic review reported low rates of self-reported STI diagnosis in two studies in which minority transmen were the majority of study participants (6% in one study; and 7% in the other study) (4). Furthermore, in one recent study, one out of 45 transmen reported being HIV-positive (2.2%) (6). In the same study, nearly 47% of study participants reported that they had been diagnosed with an STI during their lifetime.

Transmen's HIV risk²

HIV risk among transmen is not well understood. (5) Recently some researchers and other authors have begun to question the assumption that transmen were at low risk for HIV infection, and some have conducted research on their HIV risk behaviours. One systematic review (4) and a small number of needs assessment studies (2;5;9;16) of transgender people in the USA describe or suggest sexual and other risk behaviours, as well as contextual factors, that put transmen at risk of HIV infection. These HIV risk factors may also place transmen at risk of other STIs.

² Please note that we did not search the literature for particular STIs other than "HIV." See the section "What We Did," below, for an explanation of the literature searches we conducted.

In general, the literature we reviewed identifies a number sexual behaviours and sex-related behaviours that put transmen at risk of becoming infected with, and transmitting, HIV:

- unprotected sex, including unprotected anal intercourse, unprotected vaginal (“front hole”) intercourse, and unprotected oral intercourse (2;4;5;9)
- sex while under the influence of alcohol and other drugs (4;6)
- engaging in commercial sex work (4)
- sex with populations who have high rates of HIV infection, including MSM, gay men, and trans women (4)

Unprotected anal intercourse and vaginal (referred to by some transmen as “frontal” or “front hole” sex (3;6)) are understood as a high risk activities for HIV transmission among transmen. However, only three research studies distinguished between unprotected anal/vaginal/frontal intercourse *versus* unprotected oral sex:

- Washington, DC (17): Within a group of 60 African American transmen (termed “natal females” in this study):
 - 67% reported unprotected genital-genital contact in their lifetime, 22% reported unprotected genital-genital contact in the last month.
 - 15% reported unprotected genital-anal contact in their lifetime, and 3% reported unprotected genital-anal contact in the last month.
 - None reported ever having engaged in unprotected sex with a known HIV-positive partner.
- Across the USA (6): Questions about vaginal (frontal) sex, anal sex and condom use for these activities were asked of a group of 45 predominantly White transmen from across the USA who have sex with non-transmen (“trans MSM”).
 - Approximately 82% reported ever having vaginal (front) sex; 69% in the past year.
 - Among people who reported vaginal (front) sex, 33.3% reported that they never used a condom or only used a condom about half the time or less.
 - Approximately 71% reported ever having anal sex with 60% reporting engaging in anal sex in the past year.
 - Among people who reported anal sex, 17.7% reported that they never used a condom or only used a condom about half the time or less.

As part of an evaluation of an intervention to reduce HIV and STI risk in the transgender community, 181 transgender people (141 MTF; 34 MTF) answered questions about their sexual behaviour. (11) However, the reported results do not distinguish between the two groups of people.

Sharing of injecting drug equipment, including for the injection of hormones or silicone, is also a high risk activity for HIV transmission. In the studies that examined this issue with transmen, rates of lifetime needle sharing were low: 3% shared unclean needles (17); 0% needle-sharing for hormone use.(6) One study of 181 transmen and transwomen reported no needle sharing.(11)

An important finding from two relatively small studies of transgender people in the Philadelphia and Chicago regions was that transmen were significantly more likely than transwomen to engage in risky sexual behavior. (5;9) Transmen were less likely than transwomen to have used protection the last time they had sex (5), and significantly more likely to have engaged in high risk sexual activities in the three months prior to being interviewed for the study (5;9). When the Chicago study participants were asked about their future sexual behaviours, transmen were more likely than transwomen to engage in unprotected sex, non-monogamous sex, sex while drunk or high, and sex with an HIV-positive person.(9)

Transmen identify with a range of sexual orientations.(6;16) One study found that transmen were significantly more likely than transwomen to identify their sexual orientation as homosexual.(16) However, “sexual orientation” and “homosexual” were not defined for study participants. In the study, of the 27 homosexual identified FTMs, 28% reported oral-penis sex; 42% reported vagina-penis sex; 42% reported anal-penis sex; 71% reported oral-vagina sex; 88% reported oral-vagina sex; and 88% reported vagina-vagina sex. (16) This evidence suggests that transmen have sex with MSM and/or gay men, groups with historically high rates of HIV in the USA and Canada.

Numerous contextual factors (i.e., individual, interpersonal, and structural/societal factors) that may be detrimental to transgender people’s health and sexual health have also been noted in the literature. These contextual factors have largely been discussed with respect to both transmen and transwomen.

- Individual Factors
 - mental health issues and impact of psycho-social stresses (8), including suicidal thoughts(4), and anxiety and depression (7)
 - misperceptions or a low perceived risk of HIV (4;5;9)
 - low self-esteem (1;5), internalized stigma and shame (7)
 - fear of rejection by prospective sexual partners and perceived shortage of sexual partners (7)
 - seeking self-affirmation and validation of gender identity through sex with desired partners (6;7)
 - physiological and/or sex-drive changes associated with hormone use and surgeries (1;5;8)
- Interpersonal Factors
 - physical and sexual abuse and violence at home (4)
 - complicated gender and power dynamics in relationship with non-transmen (1;6)
 - difficulties associated with disclosure of trans identity to, and discussing their bodies and sex with, prospective sexual partners, including inadequate language to communicate these issues (6;10) and the need among transgender people for physical, emotional, and sexual safety (12)
 - partners’ resistance to condom use (6)
- Structural/Societal Factors

- narrowly constructed gender norms (9) and societal oppression of gender non-conformity (7)
- barriers to employment, social services, housing, legal assistance (4) and health and mental health care (2;4)

These factors have been *identified* and *discussed* in the literature. Yet, virtually no *evaluations* have been conducted to assess their impact on the HIV risk and sexual health of transmen. In addition, the research does not provide insight into how prevalent these factors are or how they interact with one another. As a result, there is virtually no published research evidence about the effect of individual and interpersonal factors on transmen's sexual decision-making, sexual behaviour and sexual health outcomes.

In one recent research study about interpersonal contextual factors, the relationship between interpersonal communication skills, sexual communication, and sexual health among 41 transgender people was examined. (12) The study found that transgender people held multiple, often competing goals in safer sex conversations as a means for negotiating emotional, physical, and sexual health in relationships. The authors also note that risk to sexual health might arise in situations where guarding against threats to physical and emotional safety and, as a result, sexual health strategies that stress condom use or sexual history discussion may inadvertently place transgender individuals at risk of physical or emotional harm.

In contrast to the lack of research on individual and interpersonal factors, access and barriers to health care for transgender people (a structural/societal factor) has been researched in more depth. This research has examined barriers including attitudes, perceptions, and denial of health care and other discriminatory behaviours by health care providers and other staff.(2;10) Being transgender may also present a larger barrier for transmen as compared to transwomen when attempting to access primary health care. For instance, two studies found that more transmen than transwomen faced barriers for physical exams. (9;11;18) These barriers are likely attributed to the fact that some medical procedures are associated with female anatomy (e.g., pap smear) and are routinely included in such exams and that some transman may struggle psychically with the female manifestations of their bodies.

Sexual health and HIV prevention needs of transmen

A small number of needs assessments, conducted among transmen in the USA, report on and discuss the health and social service, sexual health and HIV prevention needs of transgender people, including transmen.(2;5;9;16) Many of these needs flow out of the individual, interpersonal and structural/societal factors that impact the lives of transgender people (listed in the previous section of this document). In addition, numerous articles discuss the health and sexual health needs of transgender people, but do not report original research study results. Finally, the discussion section of one research article identifies the specific sexual health and HIV prevention needs of transmen who have sex with non-transmen (trans MSM).(6)

This literature identifies, the health, sexual health, and HIV prevention challenges and needs of transgender people (and in some cases transmen, where specified):

- greater visibility and affirmation of transgender identity (7)
- lack of language to talk about transgendered bodies (12)
- access to trans-knowledgeable and appropriately trained service providers (5;6;8;10;18-21), which could include:
 - improved history-taking, interviewing and data collection by health care providers, including training on how to use and interpret forms (authors refer to policy recommendations and training from the Center for Excellence on Transgender HIV Prevention (6;19) and the California STD/HIV Prevention Training Center (4;19)
 - health care practice should follow recognized standards of care for transgender people, health care providers and staff should seek out training, and physical spaces should be made more accessible to transgender people (authors refer to standards developed by the World Professional Association for Transgendered Health (8;18;19;21), the Tom Waddell Health Center (18-20), and the Transgender Training Project of the New England AIDS Education and Training Center(4;8;18;20)
 - lack of knowledge among gynecologists of the special needs of transgender people (22)
 - involving transgender people in training health care providers and staff (20)
- basic HIV prevention education for transmen and their sexual partners (5;6)
- sexual health resources and services for non-trans MSM must be fully accessible to trans MSM (6)
- the unique needs of transgender experience, identity and bodies, sexuality, and sexual safety (which are distinct from male or female sexuality) should be addressed in sex health promotion interventions (7;12)
- sexual risk reduction efforts need to take into account the multiple meanings of sexual safety (12)
- provide opportunities to develop and practice strategies for discussing and negotiating sexual safety (12)

One evaluation of an intervention to reduce HIV and STI risk among transgender people collected information on transgender men's and transgender women's sexual health behaviours, challenges and needs.(11) These included:

- trouble getting aroused (38%)
- low sexual desire (34%)
- difficulty reaching orgasm with a partner (28%)
- not informing primary health care provider of trans identity (48%)
- concealing their sexual identity from others (64%)

- discrimination as a result of gender identity of presentation (66%)

Sexual health and HIV prevention programs and interventions for transmen

We did not find any published evaluations of HIV prevention interventions specific to transmen.

One evaluation of an intervention to reduce HIV and STI risk among transgender people was published in 2005.⁽¹¹⁾ The intervention (“All Gender Health”) consisted of a two-day seminar in community-based venues and included lectures, panel discussions, videos, music, exercises and small group discussions. The intervention was delivered to 235 transgender people, and 181 (141 MTF; 34 MTF) completed the evaluation. The evaluation involved pre-test, post-test and three-month follow-up questions about attitudes, self-efficacy, and behaviours. The vast majority (93%) of people who participated in evaluation identified as White, and 73% had completed at least some college education. The study provided three key findings:

- The intervention appeared effective in improving participants’ attitudes toward condom use and safer sex self-efficacy, and in reducing their sexual risk behaviours (i.e., unprotected anal or vaginal sex outside of a primary, monogamous relationship decreased from 16% at pre-test to 9% at follow-up).
- An improvement in safer sex self-efficacy was observed between pre- and post-test measures but this was not sustained at the three-month follow-up. While the seminar provided a tremendous boost to participants’ self-esteem and self-confidence, participants struggled to hold on to these gains in their daily lives.
- Transmen were significantly more likely than transwomen to drop out of the two-day intervention and not complete the post-intervention questionnaire. As a result of the challenges encountered with attracting and retaining transmen in the study, the authors suggest that transmen might be better targeted with a separate intervention.

In addition, participants in another study of trans MSM reported high levels of internet use. This raises the potential for using the internet to disseminate accurate sexual health info among transmen and their non-transgender sexual partners, and to raise awareness about transmen in the gay male communities. (6)

Research is needed

The extent to which transmen (and transwomen to a lesser extent) have been left out of sexual health and HIV prevention research and interventions is poignantly illustrated by the fact that the most recent US Centers for Disease Control *Compendium of Evidence-Based HIV Prevention Interventions* (August 2009) does not include any best- or promising-evidence interventions for transgender people. Moreover, neither the CDC (7;20) nor the Public Health Agency of Canada includes “transgender” as a category for the collection and reporting of HIV surveillance data. A model for more complete data collection does exist—since 2002 “MTF” and “FTM” have

been gender reporting options in publicly funded HIV testing and counseling sites in California.(13)

In the literature we reviewed, numerous researchers, health care providers, academics and community members call for more research into the lives and sexual health and HIV prevention needs of transgender people and specifically of transmen. Specific recommendations include:

- Working collaboratively with transmen to conduct research. (5)
- Involving larger and more diverse samples of trans MSM, including trans MSM of colour and harder to reach people. (6)
- Conducting more research among transgender children and adolescents. (14)
- Engaging in more inclusive data collection methods to better capture subgroups of transgender people. (1)
- Engaging in qualitative research to inform the development and design of quantitative instruments to increase their relevance to the lives of transgender people (5)
- Exploring transgender people's perceptions of their own gender identity, bodies and sexual orientation, the range of sexual behaviours in which they engage, and the types of physical and psychological transitions they undergo. (5;9)
- Further exploring the HIV risk factors for transmen (types of sex partners, level of participation in commercial sex work, frequency of sharing drug and hormone injecting equipment). (4)
- Examining the effect of hormone treatment on sexual behavior patterns. (4)
- Disentangling and identifying the nature of the complex relationship between HIV risk behaviours and contextual factors.(4;13)
- Identifying types of social supports and characteristics of relationships that are most likely to produce an environment that fosters reduced risk behaviours. (4;12)
- Examine how to sustain over time the immediate positive impacts observed in one sexual health promotion program of transgender people. (11)

Factors That May Impact Local Applicability

Existing research about risk factors and the prevalence of HIV among transmen should be viewed with caution for a number of reasons. First, there are only a small number of studies and those studies are limited in terms of sample size. Second, study participants were selected in

ways that did not limit selection biases. Third, sexual risk behaviours were not defined consistently across the various studies. Finally, the study designs do not permit study findings to be extended beyond the group of transmen who participated in a particular study.

Further, all of the existing research we found involved transmen in the USA. Given that the HIV epidemic in the USA is roughly comparable to that in Canada, the research questions and methodologies (and challenges identified by those who conducted the research) may have potential to be adapted to the Canadian context.

What We Did

To identify any systematic reviews we hand searched the Cochrane HIV/AIDS review group. In addition, we searched the Cochrane Library, Health-Evidence.ca and DARE by entering 'transgender' as a search term. Next, we searched Medline and Embase using the following combination of search terms: (Transvestism [MeSH] OR Transsexualism [MeSH] or transgender [text term]) AND (HIV or sexual health (text terms)). We searched CINAHL using a combination of text terms (transgender AND [HIV or sexual health]). All databases were searched from 2004 to 6 July 2010.

Suggested Citation:

Rapid Response Service. *Transgender Men's Sexual Health and HIV Risk*. Toronto, ON: Ontario HIV Treatment Network; 2010

Reference List

- (1) Sevelius, J, Schiem, A, and Giambrone, B. What are transgender men's HIV prevention needs? San Francisco, CA: University of California San Francisco, Centre for AIDS Prevention Studies, Technology and Information Exchange Core; 2010. Report No.: Fact Sheet 67.
- (2) Kenagy GP. Transgender health: Findings from two needs assessment studies in Philadelphia. *Health & Social Work* 2005;30(1):19-26.
- (3) Gay Mens Sexual Health Alliance. *Primed: The Back Pocket Guide for Transmen and Men Who Dig Them*. Toronto, Canada: Gay Mens Sexual Health Alliance; 2010.
- (4) Herbst JH, Jacobs ED, Finlayson TJ, McKleroy VS, Neumann MS, Crepaz N. Estimating HIV prevalence and risk behaviors of transgender persons in the United States: A systematic review. *AIDS and Behavior* 2008;12(1):1-17.
- (5) Kenagy GP, Hsieh C-M, Kennedy G. The risk less known: Female-to-male transgender persons' vulnerability to HIV infection. *AIDS Care* 2005;17(2):195-207.
- (6) Sevelius J. "There's no pamphlet for the kind of sex I have": HIV-related risk factors and protective behaviors among transgender men who have sex with nontransgender men. *Journal of the Association of Nurses in AIDS Care* 2009;20(5):398-410.
- (7) Bockting WO. Transgender identity and HIV: Resilience in the face of stigma. *Focus: A Guide to AIDS Research* 2008;23(2):1-4.
- (8) Feldman JL, Goldberg JM. Transgender primary medical care. *International Journal of Transgenderism* 2006;9(3-4):3-34.
- (9) Kenagy GP, Bostwick WB. Health and social service needs of transgender people in Chicago. *International Journal of Transgenderism* 2005;8(2-3):57-66.
- (10) Sperber J, Landers S, Lawrence S. Access to health care for transgendered persons: Results of a needs assessment in Boston. *International Journal of Transgenderism* 2005;8(2-3):75-91.
- (11) Bockting WO, Robinson BE, Forberg J, Scheltema K. Evaluation of a sexual health approach to reducing HIV/STD risk in the transgender community. *AIDS Care* 2005;17(3):289-303.
- (12) Kosenko KA. Meanings and dilemmas of sexual safety and communication for transgender individuals. *Health Communication* 2009;25(2):131-41.
- (13) San Francisco AIDS Foundation. *HIV Evidence Report: Transgender Persons and HIV*. San Francisco, CA: San Francisco AIDS Foundation; 2009.

- (14) Stieglitz KA. Development, risk, and resilience of transgender youth. *Journal of the Association of Nurses in AIDS Care* 2010;21(3):192-206.
- (15) Bockting W, Huang C-Y, Ding H, Robinson B, Rosser BRS. Are transgender persons at higher risk for HIV than other sexual minorities? A comparison of HIV prevalence and risks. *International Journal of Transgenderism* 2005;8(2-3):123-31.
- (16) Kenagy GP. The health and social service needs of transgender people in Philadelphia. *International Journal of Transgenderism* 2005;8(2-3):49-56.
- (17) Xavier JM, Bobbin M, Singer B, Budd E. A needs assessment of transgendered people of color living in Washington, DC. *International Journal of Transgenderism* 2005;8(2-3):31-47.
- (18) Dutton L, Koenig K, Fennie K. Gynecologic Care of the Female-to-Male Transgender Man. *Journal of Midwifery and Women's Health* 2008;53(4):331-7.
- (19) Keller K. Transgender health and HIV. *Bulletin of Experimental Treatments for AIDS* 2009;21(4):40-50.
- (20) Lurie S. Identifying training needs of health-care providers related to treatment and care of transgendered patients: A qualitative needs assessment conducted in New England. *International Journal of Transgenderism* 2005;8(2-3):93-112.
- (21) Phillips JC, Patsdaughter CA. Transitioning into competent health and HIV care for transgender persons. *Journal of the Association of Nurses in AIDS Care* 1920;(5):335-8.
- (22) van Trotsenburg MAA. Gynecological aspects of transgender healthcare. *International Journal of Transgenderism* 2009;11(4):238-46.