

HIV prevalence and risk behaviour among men who have sex with men in Vancouver, Canada



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Background / Objectives

The majority of HIV infections in Canada occur among men who have sex with men (MSM).

We examined HIV prevalence and HIV risk and protective behaviour among participants in a cross-sectional survey of gay, bisexual and other MSM in Vancouver in order to identify gaps in current HIV prevention programs.

Methods

The ManCount Study is the Vancouver site for M-Track, a Canadian national enhanced HIV surveillance system that uses cross-sectional surveys to monitor HIV and other sexually transmitted or blood borne infections and associated risk behaviours. Participants were recruited from August 1, 2008 to February 28, 2009 through time-location sampling at community venues catering to MSM.

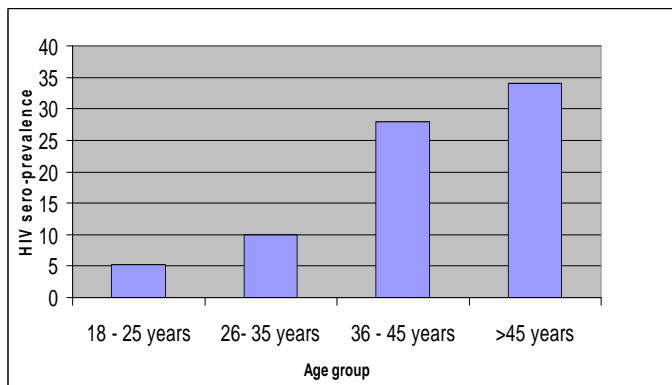
Men aged ≥ 18 years completed a self-administered questionnaire and provided a dried blood spot (DBS) for HIV and other STI testing.

We describe responses from men who self-reported as being HIV-negative compared with men who self-reported as HIV-positive.

Table 1: Participants by recruitment site

Venue type	Count (%)
Bar	635 (54)
Bathhouse	49 (4)
Event	293 (25)
Association	57 (5)
Business	135 (12)
Total	1169

Figure 1: HIV prevalence by DBS by age



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Results

Study population:

1169 participants completed questionnaires and 1139 (97.4%) provided DBS samples. The median age was 33 years (IQR 26 - 44).

The majority (75%) reported European/North American ethnicity; 6.6% Asian; 3.5% Aboriginal and 15% other. 93% had completed high school.

81% self-identified as being gay or homosexual; 11% bisexual; 2% queer; 3% two-spirited; 2% straight.

76% (813/1072) reported anal sex in last 6 months.
 58% (474/813) reported using a condom last time had anal sex.

DBS results:

208 (18.1%) were HIV positive by DBS of whom 87% also self-reported being HIV positive.

HIV sero-positivity by DBS increased with age: from 5.2% for men aged 18 – 25; 10% for men aged 26 – 35; 28% for men aged 36 – 45; to 34% for men aged >45 years. (Figure 1)

HIV risk- and protective behaviour by self-reported HIV sero-status

91.4% of HIV-negative and 90.1% of HIV-positive men were sexually active (>1 act of oral or anal sex) in the previous six months.

HIV risk reduction measures reported included:

- Condom use at last anal sex
 - 60.8% of HIV-negative men
 - 39.3% of HIV-positive men
- Sero-sorting
 - 39.5% of HIV-negative men
 - 51.3% of HIV-positive men
- Not ejaculating in their partner or vice-versa
 - 43.0% of HIV-negative men
 - 47.3% of HIV-positive men
- Strategic positioning
 - 34.9% of HIV-negative men
 - 36.0% of HIV-positive men

Unprotected anal intercourse with a partner with known discordant or unknown sero-status reported by

- 15.2% of HIV-negative men
- 33.5% of HIV-positive men

81.0% of HIV-negative men thought it was unlikely or very unlikely that they would acquire HIV during their lifetime.

Conclusions

In this sample of MSM in Vancouver, HIV prevalence by DBS testing was high and increased with age.

Condom use was the most commonly reported HIV risk reduction method among self-reported HIV negative study participants. Whereas sero-sorting was the most commonly reported method for HIV-positive participants.

Other risk reduction measures were also commonly reported by both HIV-positive and HIV-negative men.

A small, but important minority of study participants reported UAI with sero-discordant or unknown sero-status partners in the past 6 months.