

# ManCount 2008: The feasibility of including self-collected anal swabs in the M-Track second-generation HIV surveillance system

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## Background

The national M-Track second generation HIV surveillance system for men who have sex with men (MSM) combines a survey and dried blood spot (DBS) testing for HIV and other STI.<sup>1</sup> Incorporation of additional biological specimens would allow for identification of HIV co-infections and associated variables.

MSM have a high prevalence of rectal Human Papilloma Virus (HPV) and increased rates of anal cancer, particularly if HIV-positive.<sup>2,3</sup> Preventive interventions such as HPV vaccine or anal cytology testing (anal "pap" tests) are not widely available, in part due to poor understanding of the epidemiology of HPV infection among MSM.

Researchers in other settings have shown that self-collected anal swabs for HPV testing or anal cytology are as valid as clinician-collected specimens, including an earlier study among MSM in BC.<sup>4,5</sup> We examined the feasibility of inclusion of a self-collected anal swab in the Vancouver Site of the M-Track surveillance system (the ManCount Survey).

## Methods

The ManCount Survey used a venue-based sampling approach in Vancouver MSM venues (methodology described in Poster P207). Starting in the second month of survey recruitment participants who completed the survey and DBS were asked to participate in the self-collection anal swab component adapted from a previously validated method.<sup>5</sup>

Consenting participants were given an envelope containing a clinical specimen swab, a ThinPrep (PreservCyt) specimen container, alcohol wipes and a biohazard specimen transport bag, and directed to follow an enclosed instruction guide which illustrated the self-collection method. A \$10 honorarium was provided on completion, and a recruitment log was maintained at study venues.

**Participants had two options for specimen collection:** self-collection in an on-site bathroom (Option 1, recommended when available) or by following up at a later date at eight community agencies and clinics where self-collection kits were available (Option 2). Reasons for non-participation for both options were ascertained for a subset of participants completing the survey and DBS but not consenting to self-collection. Ethical approval for this study was obtained.

## Results

Between September 9 2008 and February 28 2009, 766 men completed the ManCount survey and were asked to participate in the self-collection component. In total, 268 men (35%) consented to participate, the majority consenting to on-site collection (247/268, 92%).

**Table 1: Proportion of participants consenting to self-collection of an anal swab, by venue type**

Type of Venue	Number of eligible participants <i>n</i>	Consenting to self-collection <i>n</i> (%)	Consenting to on-site (Option 1) <i>n</i> (%)	Consenting to follow-up (Option 2) <i>n</i> (%)
Bar or pub	527	155 (29.4)	139 (26.4)	16 (3.0)
Bathroom	44	31 (70.5)	31 (70.5)	0
Community event	40	8 (20.0)	8 (20.0)	0
Community organization	37	21 (56.8)	20 (54.1)	1 (2.7)
Bookstore	118	53 (44.9)	49 (41.5)	4 (3.4)
<b>Total</b>	<b>766</b>	<b>268 (35.0)</b>	<b>247 (32.2)</b>	<b>21 (2.7)</b>

Specimens were collected from all 247 men consenting to on-site collection (Option 1). Of 21 men consenting to self-collection at a follow-up site (Option 2), five men (23%) followed up and self-collected a specimen.

**Table 2: Reasons for non-participation for both self-collection options among a subset of survey participants\***

Reason for non-participation	On-site collection (Option 1) <i>n</i> (%)	Follow-up collection (Option 2) <i>n</i> (%)
Not comfortable with method of collection (anal swab)	78 (59.1)	78 (59.1)
Not comfortable with self-collection onsite / at venue	15 (11.4)	---
No time / Process will take too long	23 (17.4)	26 (19.7)
Onsite washroom or follow-up site is inaccessible	16 (12.1)	23 (17.4)
Other reason	16 (12.1)	23 (17.4)
<b>Total</b>	<b>132 (100.0)</b>	<b>132 (100.0)</b>

\* From 132 (95.0%) of 141 non-participating men from January 15 – February 28, 2009 in venues where on-site specimen collection (Option 1) was available.

## Conclusion

To our knowledge, this is the first study to use a community venue-based sampling method for collection of anal swabs for testing for HPV, anal cytology, and other STIs. We have demonstrated that self-collected anal swabs can be incorporated into the M-Track second generation HIV surveillance system, with reasonable participation (35% in this study). Participation varied by type of venue, likely reflecting factors such as the characteristics of participants at each venue, the nature of the venue, and quality and availability of bathroom facilities for on-site collection.

Despite the self-collection component being offered to participants following the ManCount survey and DBS collection (sometimes taking 45 minutes or longer), the major reason for non-participation was not being comfortable with specimen collection by anal swab.

Optimal collection of specimens was achieved where men could self-collect anal specimens on-site. If we exclude data from two venues where on-site specimen collection was mostly unavailable during the study period (accounting for 165 ManCount survey participants) the participation rate increases to 41%.

A small number of participants did provide specimens at the eight follow-up sites. However, the system for follow-up at community agencies and clinics involved a substantial amount of work to establish for little additional gain. If other sites wish to adopt this methodology identification of venues where on-site collection is possible is recommended.

## References

- Public Health Agency of Canada. HIV/AIDS: M-Track Survey. <http://www.phac-aspc.gc.ca/aids-sida/about/mtrack-eng.php>.
- Chin-Hong PV et al. Age-Related Prevalence of Anal Cancer Precursors in Homosexual Men: The EXPLORE Study. *J Nat Cancer Inst*, Jun 15 2005;97(12):896-905.
- Chin-Hong PV et al. Age-Specific Prevalence of Anal Human Papillomavirus Infection in HIV-Negative Sexually Active Men Who Have Sex with Men: The EXPLORE Study. *JID* 2004; 190:2070-2076.
- Chin-Hong PV et al. Comparison of Patient- and Clinician-Collected Anal Cytology Samples to Screen for Human Papillomavirus-Associated Anal Intraepithelial Neoplasia in Men Who Have Sex with Men. *Ann Intern Med* 2008; 149:300-306.
- Lampinen TM et al. Self-Screening for Rectal Sexually Transmitted Infections: Human Papillomavirus. *CID* 2006; 42:308-309.