

# A Montreal survey on HIV infection and sexual behaviour among men having sex with men (MSM): ARGUS 2005

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## INTRODUCTION

- In the past few years, Canada and other industrialised countries have observed increasing risky sexual behaviours of MSM and in some regions an increase in STI and HIV incidence.
- ARGUS 2005 is the first of a series of biennial surveys of MSM living in Montreal. The survey is part of a national second-generation surveillance project (M-Track) of the Public Health Agency of Canada

## OBJECTIVE

- To describe the characteristics of MSM recruited as of April 25, 2005.

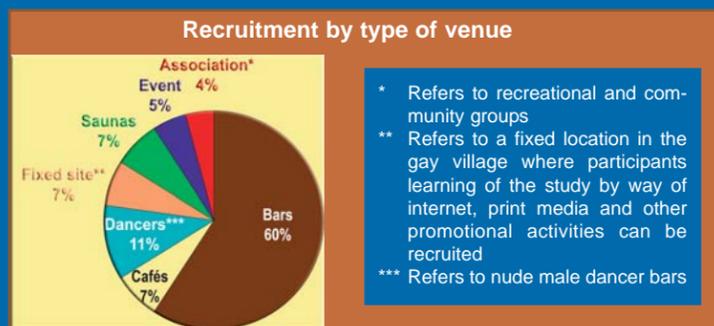
## METHODS

- A sample of 2000 to 2500 MSM will be recruited for this cross-sectional survey. Participants must be male, 18 years of age or over, and live on the island of Montreal.
- A diverse sample of MSM is being sought. Men will be recruited from approximately 60 gay social venues (bars, saunas, recreational groups, gay social events, etc.); the study is promoted using the internet and local print media.
- A self-administered questionnaire is used to collect data on socio-demographic factors, drug and alcohol use, STI testing behaviours, and sexual behaviours during the last sexual act and in the previous 6 months. The questionnaire was developed with input from:

- Health Canada, MSM study group team
- Public Health Agency of Canada, M-track study group
- Montreal, Omega Cohort study
- Montreal ARGUS Advisory Committee
- Dried blood spot (DBS) picture specimens are also collected. These will be analysed for the presence of antibodies for HIV and hepatitis C virus (HCV). A 'detuned' assay for HIV antibodies will allow the estimation of HIV incidence. In addition, a syphilis assay using DBS specimens will be validated.

## RESULTS

- Recruitment began in January 2005. By the end of April 2005, 2260 MSM had been approached to participate. Of these men, 1666 (74%) were eligible. Ineligibility was most frequently due to residence outside of Montreal.
- Among eligible men (n=1666), 512 (31%) refused to participate, 122 (7%) agreed to answer a partial questionnaire (8 questions) and 1032 (62%) completed the questionnaire, 99% of these participants also provided a DBS specimen.



### Drug and alcohol use in past 6 months (n=1032)

Weekly consumption of 5 or more alcoholic beverages at least once	32%
Injected heroin at least once	1%
Injected cocaine at least once	2%
Drug consumption within 2 hours before or while having sex at least once	
Marijuana	34%
Poppers	24%
Cocaine	19%
Crystal meth	5%

### HIV, syphilis and Hepatitis C virus testing and status

	Ever tested (n=1032)	Positive (tested)	Positive (whole)
HIV	78%	16%	13%
Syphilis	44%	12%	5%
Hepatitis C	53%	7%	3%

### Sexual behaviours in past 6 months (n=1032)

Men who had sex	91%
≥ 6 casual partners	32%
Group sex (sex with several man at the same time) at least once	21%
Sex given or received in exchange for money, drugs at least once	18%
Looking for unprotected anal sex (barebacking) at least once	9%

### Profile of the study population (n=1032)

Age 18 to 30	30%
Being in a male couple relationship	17%
Self-identified as bisexual	19%
Spending more than half of their social time with gay men	80%
Report having at least one HIV+ gay friend	43%
Being "quite" to "strongly satisfied" with their sexual life	72%
Being "quite" to "strongly satisfied" with their social life	81%



### At least one episode of unprotected anal sex by partner type in past 6 months (n = 1032)

	Casual Partner*	Regular HIV-	Regular HIV+	Regular HIV status unknown
Anal insertive	18%	18%	3%	7%
Anal receptive	14%	17%	2%	6%

\* Man with whom you had sex only once;  
§ Man with whom you had sex at least twice

## DISCUSSION

- To date, the majority of participants have been recruited from bars. A rapid rate of recruitment (100 participants per week) has been sustained since late January 2005. The challenge will be to achieve a targeted sample size of 2000 to 2500 by July 2005.
- Almost 2/3 of eligible men accept to provide a blood sample; the quality of these specimens has been excellent assuring the planned laboratory analyses.
- A large proportion of men define themselves as bisexual. This may be associated with younger age and will be explored.
- Almost 1/3 of participants consume 5 drinks or more on one occasion weekly and a fair number of men reported using drugs at least once just prior to or during sex: cocaine (19%), poppers (24%), and marijuana (34%).
- While the use of crystal meth has been linked to at-risk sexual behaviours of MSM, additional analyses will be undertaken to examine: trends in use (comparisons with previous studies of MSM in Montreal, e.g. Cohort Omega); its association with risky sexual behaviours.
- The reported prevalence of HIV and syphilis is consistent with existing estimates for Montreal. Hepatitis C prevalence is higher than in the general population; this likely reflects a combination of risk factors, including the use of HCV-contaminated equipment used to inject and snort drugs.
- 26% of MSM (28% of sexually active MSM) reported at least one episode of unprotected anal insertive and/or receptive sex in the last 6 months, with a casual partner and/or a regular HIV+ partner and/or a regular partner of unknown status.

## ACKNOWLEDGEMENTS

### STUDY PARTICIPANTS

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