

ONTARIO MEN'S SURVEY
FINAL REPORT

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THE RESEARCH TEAM

The project was undertaken by a research team with extensive experience in behavioural and sero-prevalence studies related to HIV, as well as in research and community programme development among men who have sex with men.

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EXECUTIVE SUMMARY

The Ontario Men's Survey was undertaken through the HIV Social, Behavioural and Epidemiological Studies Unit (HIV Studies Unit) of the Faculty of Medicine at the University of Toronto by a research team composed of university and community investigators working with a provincial community advisory committee. The study was developed through extensive consultation with service providers and AIDS Service Organisations in Ontario cities. The survey was based in venues (bars and bathhouses) and community groups in 13 regions of the province. It included a self-report survey questionnaire, which was available in seven languages, and an optional HIV antibody testing of saliva.

The major goal of the study was to conduct a comprehensive cross-sectional socio-behavioural and HIV prevalence study among self-identified gay and bisexual men in Ontario.

The findings of The Ontario Men's Survey provide an important and updated baseline on HIV infection among gay and bisexual men in Ontario, and their social lives and sexual and health behaviours. This cross-sectional survey, which recruited 5,080 men, surpassing the target of 5,000, is the largest study of gay and bisexual men ever conducted in Canada.

The study focussed on recruiting a more diverse sample of self-identified gay and bisexual men in Ontario than had been achieved previously. Compared to the Ontario portion of the National Men's Survey conducted more than 10 years earlier, the present survey found a marginal increase in the proportion of respondents in Toronto recruited through bars, and a considerably lower percent recruited through bathhouses. About double were recruited through community venues and community groups. In the rest of Ontario, higher proportions were recruited through community dances and groups.

The study recruited a more diverse sample than had previously been achieved. Increased diversity may be due to recruitment methods, the development and advancement of gay community and culture, or it may be a reflection of changes within individuals' sexual lives, changes in demographics of the province and changing attitudes of society.

The study recruited a greater proportion of younger men (age 20 and under), and older men (age 50 or more); and increased proportions of men with lower education. In Toronto there was double the percentage of men with a first language other than English. As race was not examined in previous surveys it was not possible to assess any change. Although the sample of visible minorities and races in Toronto does not reflect the true proportion in the population, nevertheless it would appear that this study recruited the largest non-Caucasian sample of gay and bisexual men in such a survey to date in Toronto.

As in the 1990s, men still go to bars to find sexual partners. However today the internet also has become a prominent source of sexual contact. Survey findings indicate sexual risk behaviour with casual partners was less than with regular partners. The study

confirms research conducted elsewhere which suggests that gay and bisexual men do consider risk and utilize strategies for protecting themselves and others in many of their sexual encounters. Also, men's risk behaviour appears to differ based upon assumptions or knowledge of a sex partner's HIV status. We notice many similarities in many of the variables right across the province. At the same time, there are some important differences.

This study provided the first evidence in a community-based sample of an increase in the numbers of gay and bisexual men in Ontario who report at least one episode of unprotected anal intercourse. Based on the best available data, the proportion of men reporting at least one episode of unprotected anal intercourse in Toronto has doubled in the 10 years since the National Men's Survey and has slightly less than doubled in the rest of Ontario. While these behaviours may explain increases in HIV infections, the increase could be due to other factors as well. Patterns of unprotected sex appear to be changing, and they appear to vary with age, education and sexual identity.

The study provides some insight into men's practices and use of condoms. Rates of condom breakage, slippage and delayed application and descriptions of condom use suggest possible points of intervention for HIV prevention and educational programs across the province.

A greater proportion of men in the Ontario Men's Survey than in the National Men's Survey had been tested for HIV. In Toronto, close to 80% had been tested, compared to about 65% in the National Men's Survey. In the rest of Ontario, between 73% and 82% of respondents had been tested, compared to about 61% in the National Men's Survey.

Establishing HIV prevalence (the rate of all HIV infections in a population) on the basis of saliva testing is considered more accurate and up to date than self-reported status. Undoubtedly, this study provides the most accurate recording of HIV prevalence in the gay and bisexual community to date. In this study the highest HIV prevalence rates were found in Toronto, a finding that is in agreement with provincial HIV testing data. Yet important differences in HIV prevalence rates were found by age, education and sexual orientation.

Comparisons of self-reported HIV status and the HIV test results based on saliva reveal some critical and important discrepant findings. For 16% of all laboratory HIV-positive test results, individuals self-reported their status to be HIV negative. For another 11% of laboratory HIV positive test results, men did not report their result, indicated they did not know the result of the test or said they had never had an HIV test. This suggests that more than a quarter of respondents did not know their status or refused to disclose it in this study.

This report is intended to describe the historical context leading up to the current study, the research methods and processes utilized, and to provide to Ontario regions a snapshot of life within their communities. The hope is that these data will contribute to discussions within communities and across the province. Ongoing community processes and further research among these populations are considered vital to HIV prevention, treatment, education and care in Ontario and across Canada.

INTRODUCTION AND OBJECTIVES

This report describes the Ontario Men's Survey, a study of socio-behavioural issues and HIV prevalence in a non-clinical sample of self-identified gay and bisexual men. It describes the pre-study community consultations, methods and study design, including the promotional campaign, the recruitment strategy, the survey instrument and the process for collecting biological specimens. The report includes a brief discussion of descriptive results, comments on the findings and implications for sexual health work with gay and bisexual men. As well, some of the challenges and limitations of the study are noted.

Study Objectives

The major goal was to conduct a comprehensive cross-sectional socio-behavioural and HIV prevalence study among self-identified gay and bisexual men in Ontario. Specific objectives included:

- To develop an understanding of variations in behaviours and HIV prevalence between regions of the province and to understand the factors associated with these variations.
- To compare HIV prevalence and HIV testing data with other studies and with Ontario's voluntary HIV testing database.
- To determine changes in patterns of behaviour and HIV-related issues affecting gay men, bisexual men and other men who have sex with men in Ontario through comparison with previous surveys.
- To provide some understanding of current issues associated with HIV infection and related behaviour, and particularly to understand selected factors and issues that may contribute to the increase in HIV infections.

This preliminary look at the data is organised by regions and is primarily descriptive. Future analyses will look at specific questions of interest to the community and the researchers. Issues yet to be examined include: mobility of gay men in Ontario; HIV testing behaviours, including testing outside the community; sexual health and sexually transmitted infections; sexual risk in the context of casual or regular relationships; episode-specific aspects of risk; community affiliation and socialisation; alcohol and drug use; and topics specific to ethno-cultural communities and to younger gay and bisexual men.

BACKGROUND TO THE ONTARIO MEN'S SURVEY

In the years leading up to this study, Ontario data suggest a significant increase in HIV infection among men who have sex with men (MSM) (Calzavara et al; 2000, Remis et al, 2000). Data on repeat testers and reports based on voluntary HIV testing data maintained in the Provincial Public Health Laboratory indicate that while rates for MSM dropped from 1.5/100 person-years in 1992 to 0.87 in 1996, they increased to 2.07 in 1999 (Calzavara et al, 2000). HIV incidence (the rate or proportion of new HIV infections in a population) is significantly higher in Toronto and Ottawa than in other regions. Between 1996 and 1999, increases were significant in the 30–39 and 40–49 age groups. This pattern was reflected in San Francisco, New York and other large urban centres (Coates et al, 2000). In the reports of The Ontario Epidemiology/Surveillance Working Group (Remis & Vermeulen, 1997), The Ontario Social Science Working Group (Calzavara, 1998) and The Community Consultation on Priorities in HIV/AIDS Surveillance and Epidemiologic Research Unit Ontario, research from 1998 to 2003 of self-identified gay and bisexual men, and other men who have sex with men, was highlighted as a priority. These reports stated a need for data on: HIV and behavioural prevalence; HIV incidence; the understanding of behaviour, risk situations and contexts; determinants (personal, familial, communal, social, economic, political and cultural); structural influences on behaviour; and effective interventions. Clearly the importance given to each of these areas varies with the level of organisation for which the data are required (e.g. government, community-based organisation) and the purpose of the data (e.g. policy or programme development). Not all data needs can be met in a single study, and multiple methods are frequently required for a full understanding (Boulton, 1993).

The available epidemiological information on HIV among gay and bisexual men in Ontario primarily comes from voluntary HIV antibody testing programmes in the province. These data provide limited information about the behaviours and characteristics of HIV infected and affected populations and the context of the spread of the epidemic. Further, the extent to which HIV prevalence and incidence data from the small sub-groups of voluntary testers reflect on the broader community of gay and bisexual men is unknown. Results from existing data sources can be generalised only to a limited degree. The bias inherent in the recruitment of men for cohort studies and the influence of participation on measures of behaviour and HIV incidence are not fully understood. The Ontario Men's Survey provides additional elements of the picture.

THE EPIDEMIC IN CANADA AND ONTARIO

Health Canada has produced estimates of HIV prevalence (the rate of HIV infection in a population) and HIV incidence (the rate or proportion of new HIV infections in a population during a period of time). These estimates were produced using a combination of methods, incorporating data from a wide variety of sources, including HIV test reports, AIDS case reports, population-based surveys, targeted epidemiological studies and census data. At the end of 2002, an estimated 56,000 people (with a range of 46,000 to 66,000) in Canada were living with HIV (includes those living with AIDS) and 2,800 to 5,200 were newly infected with HIV in 2002. In addition, an estimated 30% are believed to be living with HIV but were unaware that they are infected and are consequently not represented in the HIV surveillance data. Men who have sex with men comprised 58% of the overall total.

The estimated number of new infections (incident infections) in Canada continues at approximately the same rate for the past three years. Between 2,800 and 5,200 new HIV infections occurred in 2002, compared with 3,310 to 5,150 in 1999. Men who have sex with men continue to account for the greatest number of new infections: 1,000 to 2,000; about 40% of the national total of new infections in 2002. While the number of men who have sex with men among new infections steadily declined until 1996, it has increased since then.

Ontario has the largest number of HIV infections in Canada. Approximately 44% of diagnosed infections are in Ontario (Health Canada, 2003). As of the end of 2002, a cumulative 23,523 HIV infections had been officially diagnosed in Ontario. Approximately 1,000 new HIV infections were diagnosed annually for the past six years (Remis et al, 2003). The proportion of HIV diagnoses comprised of MSM gradually decreased over the 17-year period from 1985 to 2001 but increased slightly to 46% in 2002 from 42% in 2001. In Ontario, 7,329 AIDS cases (based on diagnostic criterion rather than HIV infection) have been reported since the beginning of the HIV epidemic. Men who have sex with men account for 71% of all AIDS cases reported to December 2002 in Ontario (Remis et al, 2003).

OTHER STUDIES OF GAY AND BISEXUAL MEN

Other studies that describe issues of the epidemic among gay and bisexual men include two cohort studies: *The Toronto Sexual Contact Study* (Coates et al, 1986; Calzavara et al, 1991) and *The Talking Sex Project* (Myers et al, 1992). *The BiSex Survey* applied a toll-free telephone interview method to survey a population of behaviourally bisexual men in the province (Myers et al, 1998). No HIV prevalence studies have been conducted among gay and bisexual men in Ontario. In addition to surveys there have been numerous qualitative analyses, for example Adam et al, 2003, Calzavara et al, 2000a, Haubrich et al, 2004, Murray et al, 2001 and Myers et al, 2004.

Much of our current understanding of the epidemic among gay and bisexual men in Canada is being shaped by three Canadian cohort studies examining this pop-

ulation: *The Vanguard Project* based in Vancouver, the *Omega Cohort Study* in Montreal and the Ontario-based *Polaris HIV Seroconversion Study*.

We know that general population surveys do not provide an adequate sample of gay and bisexual men (Stall et al, 2003). In such surveys, male-to-male sexual encounters are under-represented. A series of cross-sectional studies using purposive sampling has been suggested to provide a complimentary and more complete picture (Kippax, S., 2003; Joseph et al, 1984; Leaver, 2004).

Three previous venue-based surveys contributed considerably to the focus and method of the *Ontario Men's Survey*. These studies were conducted mainly in venues where gay and bisexual men have traditionally socialised and where HIV prevention information has been communicated. These and other important studies in the gay community have established in Canada the importance of researchers and community working together (Allman et al, 1997; Graydon, 1997; Trussler et al, 2003).

Men's Survey '90

This study provided a snapshot of the knowledge, attitudes and behaviour of 1,295 gay and bisexual men in Toronto. The study was conducted only in bars and bathhouses through the AIDS Committee of Toronto, in collaboration with the City of Toronto, Department of Public Health.

Men's Survey; Au Masculin (The National Men's Survey, 1991)

The *National Men's Survey* was a Canada-wide survey of knowledge, attitudes and behaviour in relation to HIV infection. The project was a collaboration between university-based researchers and the staff and volunteers of member organisations of the Canadian AIDS Society (CAS). Data collection for the project was carried out in 35 cities, in bars, in bathhouses and at community events. This multicentre survey described differences between seven sampling strata or regions. The self-completed questionnaire, modelled on *Men's Survey '90*, was available in English and French. The overall sample size of the survey was 4,803. In Ontario there were 675 participants from Toronto and 675 from 12 other communities.

Winnipeg Men's Survey, 1995

The *Winnipeg Men's Survey* was a pilot study of the method employed by the Ontario Men's Survey of gay and bisexual men; its principal goal was to determine the feasibility of combining a self-report questionnaire and an HIV prevalence component in a venue-based survey (Allman et al, 1995). Data were collected in bars, bathhouses, at community events and through community groups and outreach. A final sample size of 468 was achieved, with 399 (85.3%) participating in both aspects of the study.

COMMUNITY CONSULTATIONS AND RESEARCH NEEDS ASSESSMENT

Before this study was funded, a province-wide community consultation on specific needs was undertaken. Between April and June of 1999, staff of the HIV Studies Unit visited each of the 12 Ontario regions that participated in The *Canadian Survey of Gay and Bisexual Men and HIV Infection: Men's Survey* (commonly called the National Men's Survey, 1991). The main objective of the consultations was to determine and discuss the thoughts of educators, policy makers and community members about research on men who have sex with men, to determine the questions communities had and to assess the feasibility of conducting a province-wide men's socio-behavioural survey that would include a seroprevalence component.

Consistent themes emerged across the Ontario cities.

- All communities expressed an urgent need for such a survey to inform future prevention and care programming for gay and bisexual men in Ontario.
- All communities expressed concern that data from the 1991 National Men's Survey may be outdated and not reflect the current sexual practices, attitudes and knowledge base of gay men.
- Communities expressed concern about the reliance on data from other provinces and countries to develop HIV prevention programming initiatives for gay and bisexual men.
- Smaller communities perceived that the 1991 National Men's Survey was more likely to benefit Toronto MSM educators, given the disproportionately large pool of data collected there. Smaller communities highlighted the need for all communities to collect sufficient data to create a comprehensive, community-specific picture of HIV issues for gay and bisexual men.
- All communities expressed a desire for a broader recruitment strategy than the one used in the National Men's Survey.
- Toronto MSM educators expressed an urgent need for data reflecting the needs of diverse ethno-cultural MSM.
- All except one community supported the need for a seroprevalence component in the study.

To develop AIDS prevention, education and support strategies, we need an understanding of the knowledge, attitudes, behaviour and extent of infection among gay and bisexual men. In the 1980s and early 1990s, not enough was known about the lives of Canadian gay men, and this lack of knowledge hampered AIDS work.

THE STUDY DESIGN AND PREPARATION

PROJECT TIMELINE

Funding for this project was received in May 2001. Between June and October, the project was set up and research protocol was refined. Between October 2001 and January 2002, collaborating communities were prepared, the study promotion materials were developed, the questionnaire was finalised and translated, and the materials were printed. Primary data were collected between February and June 2002. Data were cleaned and entered between April and December 2002. Preliminary data synthesis and interpretation occurred between October and December 2002. Refinement of the data and variables is ongoing. In January 2003 there was a consultation meeting with the Provincial Advisory Committee (see Appendix 1), which included the preliminary presentation of the data. In August 2003 the ethno-cultural data were analysed, and the Toronto Co-ordinating Committee held a meeting (see Appendix 2). In April/May 2004 the research team met once again with the Provincial and Toronto Committees to discuss the dissemination of the report.

LOCAL COMMUNITY ORGANIZATION

In consultations in the province in 1999, 13 AIDS Service Organisations agreed to take the lead for recruitment and data collection in their region. Contracts were negotiated and funds were transferred to hire local co-ordinator(s) and to compensate for travel and administrative costs.

In Toronto, there were two full-time co-ordinator positions for six months. In Ottawa, one full-time co-ordinator was hired, and in other communities co-ordinators were hired part-time. Hiring and supervision of the local co-ordinator was the responsibility of the participating agency in each region, using a position description that was prepared as a guide. Direct supervision of the local co-ordinator was provided by the AIDS Service Organisations; guidance and research protocols were set by the research team.

A training session for the local co-ordinators was held in December 2001 at the University of Toronto. Emphasis in the training included background on the Ontario Men's Survey (OMS), community outreach, volunteer supervision, policy and practices of data collection, ethics and confidentiality. Specific training focused on the data collection manual and the principles and procedures to be followed.

Local co-ordinators were responsible for a) promoting the study within their region, b) meeting with venue operators and community group leaders to arrange data collection and c) consulting with the central research team to troubleshoot, and to develop a local recruitment and data-collection strategy.

Volunteers

The Ontario Men's Survey was dependent on volunteers to assist with data collection. Volunteers were recruited locally in each community and worked under the supervision of the local co-ordinator. Since one of the goals of the Ontario Men's Survey was to reach a diverse group of respondents, a diverse set of volunteers was sought. Local co-ordinators were asked to consider the following people as potential volunteers: a) people of all ages and physical abilities, b) members of visible minorities, c) women, for venues where their admission is permitted, d) people who speak a language other than English or French that was common in a region, or who speak one of the languages targeted by the Ontario Men's Survey. All volunteers were trained by the local co-ordinator following prescribed data-collection and volunteer training protocols.

The project director conducted on-site volunteer training; one session was held locally in each participating community at the beginning of data collection, and additional training sessions were held as required.

Volunteer participation enhanced the community involvement in this study, and the volunteers' knowledge of local gay and bisexual networks and resources was essential to the success of the study. To recognise their efforts, the project made funds available for volunteer appreciation events at the end of data collection.

POPULATION

This is primarily a study of self-identified gay and bisexual men. We recognise that there are other populations of men who have sex with men who may fall outside this definition. As a venue-based study, where the population was recruited through gay bars, bathhouses and community groups, the target group was assumed to have some identification or association with the gay community.

RECRUITMENT AND PROMOTION

In the context of the OMS, recruitment included a set of strategies to 1) introduce the study to the gay communities we wanted to involve in the research, 2) invite men to participate, as well as 3) introduce the study to the general public.

Promotional materials designed to inform and to generate word-of-mouth publicity were distributed differently in each community. In larger cities they were distributed liberally by volunteers and local co-ordinators. In less populated areas/regions the means for circulating survey information was more limited. In cities with no gay-identified bars or a bathhouse, community groups were often the only option.

A media press release kit was prepared by the research team and provided to media

outlets before the start of data collection. The research team in Toronto participated in radio and television interviews as requests were received. The press releases were made available to all participating communities. Local co-ordinators used these documents for public awareness efforts in their area. Question and answer sheets assisted in ensuring that uniform messages about the survey were received in communities (see Appendix 3).

Promotional materials used in the Ontario Men's Survey were designed for simplicity, legibility and recognition. The provincial community advisory committee was consulted in the development process to ensure that the visual identity of the survey would be suitable for the different participating communities. All materials were externally reviewed for literacy and language level. Some of the specific materials developed are described in Appendix 4.

Central Website and Telephone Line

The research team established a website at www.mens-survey.ca to disseminate survey information. There was also a toll-free telephone line at 1-888-266-1449 (note: the toll-free telephone line is no longer in operation). This line was located at the HIV Studies Unit, University of Toronto and was staffed during office hours. It provided a recorded message at other times. Calls were redirected to local communities where applicable.

Advertising

At the beginning of data collection, full-page advertisements were purchased in the Ontario editions of *Xtra!*. The purpose of these ads was to generate interest in the Ontario Men's Survey and to establish the study's identity. Beyond this, the Ontario Men's Survey did not use standard display advertising in printed media, as the study was venue-based. Some communities did use classified advertising to contact potential respondents.

SAMPLING

The Ontario Men's Survey relied mainly on "convenience sampling" or "purposive sampling." Respondents were invited to participate if they were present in one of the defined data collection venues at the time of data collection. Efforts were made to ensure a diverse sampling within the gay and bisexual communities. Where these efforts did not completely succeed, we sought additional respondents of a particular type (purposive sampling).

To secure a sample as diverse as possible, data collection was conducted in as many different bars, bathhouses, and events as possible. Volunteers tried to vary the day of the week and time of day over the course of several visits to any particular venue. Special efforts were made to involve the participation of many different community

groups to help reach gay and bisexual men who might not frequent gay-identified establishments. Volunteers made efforts to systematically approach people of all ages rather than only those with whom they might feel most comfortable.

COMPONENTS OF THE RESEARCH

Questionnaire Components

The composition of the questionnaire was decided during broad community consultation, the review of other research and consultation with research groups doing similar studies of gay and bisexual men (see Appendix 5). During the development stages, the questionnaire was pre-tested by the advisory committee, local co-ordinators and volunteer recruiters. Because the questionnaire was distributed in public settings and because men were asked to give up some of their recreational or group time, the number of questions had to be limited. The goal was to design a questionnaire that could be completed in 15–20 minutes. Not every question considered could be included. Many questions were set aside and will be considered for use in future surveys. Note: In this report it is not possible to describe all data. This report focuses primarily on the participant, sexual behaviour and seroprevalence components of the study. A separate report on the “Condom Country Campaign,” an education initiative the Ontario Men’s Survey helped evaluate, was prepared by the AIDS Committee of Toronto in co-operation with researchers (see Appendix 6).

Languages

In previous surveys of gay and bisexual men in Canada, the majority of respondents have come from English- and French-speaking cultures. In response to requests from a number of ethno-cultural groups in Toronto and Ottawa, the questionnaire was translated into five additional languages: Chinese, Portuguese, Spanish, Tamil and Vietnamese.

The languages chosen reflected the culturally specific Toronto AIDS Service Organisations that participated. The AIDS Service Organisation representatives assisted in the recommendation, screening and approval of the translators. In cases where the AIDS Service Organisation was not able to recommend a suitable candidate, a translator was found through the City of Toronto.

To facilitate the translation, the research team worked with representatives from AIDS Service Organisations in Toronto and Ontario that serve specific ethno-cultural groups. These representatives advised the research team of data collection opportunities and cultural issues in recruiting men in these and other ethno-cultural communities.

The initial goal was to recruit at least two hundred respondents in each of the seven ethno-cultural groups.

Questions Exploring Race and Ethno-cultural Issues

Prior to the study the researchers explored the research needs of ethno-cultural communities in the Toronto area (Myers et al, 2001) and collaborated with the Toronto Co-ordinating Committee. A sequence of questions concerning race and ethno-cultural identity was prepared. However, the Ontario Men's Survey was not conceived as or intended to be a definitive examination of the ethno-cultural factors related to HIV/AIDS.

Questionnaire Design

There were several distinctive features of the physical design of the Ontario Men's Survey questionnaire:

- **Format.** The printed questionnaires were fitted with an oversized cardstock cover that permitted the respondent to use a clipboard during completion of the survey. This addressed several concerns: ease of handling, having a firm writing surface, and providing some privacy from onlookers.
- **Printing.** Translated questionnaires were laid out in a two-sided, parallel format, with the target language on the left (normally the even-numbered) pages and the English text on the right (odd-numbered) pages. This allowed the respondent to refer to both languages easily.
- **Colour.** Each target language was assigned a distinct cover colour for easy identification of survey booklets by the researchers and survey administrators.

HIV and Hepatitis C Prevalence Component

The second component of the Ontario Men's Survey was the collection of an optional saliva sample for HIV testing and possible testing for hepatitis viruses. Upon completion of the questionnaire, respondents were asked to provide a saliva specimen. Participation in the questionnaire component did not commit an individual to provide a saliva sample. However, as this was an important part of the study, individuals were encouraged to participate. They were informed that the process was completely anonymous and confidential.

The specimen was collected with the Omni-Sal™, an auto-manipulated oral collection device. The device is placed under the tongue and has an indicator that turns blue when sufficient saliva has been collected. Samples were refrigerated as soon as possible after collection and couriered in an insulated container to the testing laboratory within one week of collection.

As a body fluid, saliva has much different social, cultural and historic meaning than blood. In addition, saliva collection is much less invasive and intimidating than the collection of a blood sample. Nevertheless, waiting for the saliva device could be discomforting

and embarrassing, since the respondent had to make an effort not to speak or move about and may have been watched by surrounding people. Volunteers needed to be understanding and sympathetic during this process.

HIV Antibody Testing

The HIV Laboratory at the Provincial Public Health Laboratory, Ontario Ministry of Health and Long-Term Care, analysed the saliva samples. Fluid specimens were tested for the HIV antibody using the enzyme-linked immunoabsorbent assays (ELISA) kits. The first screen is the Detect HIV (v.1) HIV1/2 (Adaltis), and the second screen the Vironostika HIV1 EIA (bioMérieux). If the second is not reactive (indeterminate or negative) the discrepancy is resolved using a Genetics Systems HIV1 Western Blot (BioRad).

Hepatitis C Testing

Funds have been received for hepatitis testing from the Hepatitis C Strategic Research Initiative of the Canadian Institutes of Health Research. At the time of this report, the analysis of the samples is pending. The University of Toronto Research Ethics Board has approved the testing, and participants were informed and agreed to future testing of saliva samples for hepatitis viruses prior to their participation.

ETHICS AND SENSITIVITIES

Local co-ordinators and volunteers were alerted to the sensitive nature of the two research components of the Ontario Men's Survey—the questionnaire, which dealt with topics such as HIV, health, illness and racism, and the saliva collection and its relation to HIV and AIDS. Due to the seriousness of these topics, volunteers needed to be sensitive to the possible emotional effects of participation.

Volunteers were trained to inform respondents in a reassuring manner that:

- The change in colour of the indicator only specified that an adequate amount of saliva has been absorbed, and did not in any way reflect their HIV or hepatitis C status.
- The saliva test did not provide immediate diagnostic results. Samples were sent to a laboratory for processing. The methods used to test saliva have not been licensed in Canada for clinical purposes and are therefore only used for research.
- Test results were not available from any staff or volunteers of the survey. To maintain the anonymity of respondents, no identifying information was taken or recorded, and therefore test results could not be linked back to any one respondent.

For some men, participating in the Ontario Men's Survey led to further questions and a need for information, counselling or testing services. Volunteers were equipped with an information sheet that explained the saliva test, listed local resources for follow-up, and suggested where individuals might go to receive a diagnostic HIV antibody test.

Confidentiality

All local co-ordinators, volunteers and any other individuals involved were required to sign an Oath of Confidentiality. Some of the questions in the survey were personal in nature. The perception that volunteers might reveal information from the survey could affect the rate of participation. For people who did participate, concern over an apparent lack of confidentiality could lead to untruthful responses.

The Ontario Men's Survey included a saliva component. HIV status is a highly sensitive matter, and people could be wary despite assurances that the survey representatives had no way to link results back to individual participants. For compliance with the saliva component, participants needed to trust volunteers to be professional and confidential. The Ontario Men's Survey made a guarantee to participants that the study was anonymous. If a questionnaire or saliva sample were in any way linked to a particular individual, the integrity of the Ontario Men's Survey and the trust of the community could be damaged.

Volunteers had access to the content of the questionnaire, and this material could not be divulged carelessly. It was important for the quality of the data that conditions were as similar as possible for each respondent. If volunteers revealed the content and allowed participants to think about their responses, the data collection conditions could have changed for those respondents. The Ontario Men's Survey needed to be represented in a positive and professional manner. Concerns or complaints about the study were to be discussed with the local co-ordinator or central research team. Public criticism of the Ontario Men's Survey could reduce the participation rate. Part of the ethical commitment in research is to do no harm to any party involved. It was important that participation in the Ontario Men's Survey would be a good experience that did not leave any respondent with lingering doubts or fears about privacy.

DATA COLLECTION

Data collection took place from January to March 2002 in most communities. In Toronto, the collection period was from January to June 2002.

During the collection period, local co-ordinators arranged data collection events with the venues in their regions. During these events, the local co-ordinator and volunteers approached men in the venues and asked them to participate in the Ontario Men's Survey. Men who consented were asked to fill out the questionnaire and, optionally, to provide a saliva sample.

Ideally, every man in a venue was approached, although this was not possible in every situation. During training, local co-ordinators and volunteers were instructed to be as systematic as possible when recruiting participants. Local co-ordinators were informed of potential bias and ways of avoiding it.

To reach a diverse group of men, local co-ordinators approached three types of venues for participation in the Ontario Men's Survey: bars, bathhouses and community groups. The number of different participating venues of each type varied across the regions, as shown in Appendix 7. Note that the table includes unique venues and does not reflect the total number of data collection events.

Community-Level Strategy

Following initial consultations with the Provincial Community Advisory Committee and individual communities, sample sizes were agreed upon as shown in Table 1 (page 39). Each participating community faced some unique opportunities and challenges in attaining their sample size goal. To obtain the required sample each community undertook:

- To complete a community profile to help identify possible recruitment opportunities.
- To estimate the total number of men that could be surveyed in each venue, considering the size, capacity and level of traffic at the location.
- To estimate the number of data collection events required in each venue to achieve the goal for the location.
- To make contacts with community groups and venue owners/managers where recruitment was to take place.
- To pre-schedule the required number of visits, varying the day and time of the events.
- To check progress against these estimates and revise if necessary.

Payment of Respondents/Coupons

To express appreciation for participating in the Ontario Men's Survey, each respondent was paid \$5 as an appreciation. A token system was developed so volunteers and co-ordinators would not be responsible for handling cash. The payment amount was consistent with the amount paid in previous studies and was a token of thanks for participation, not a reimbursement for time.

In some data collection events, participants wished to donate their \$5 to a designated organisation or group of organisations. The terms of participation and recipient of donations were determined before the first data collection event in any venue.

CHALLENGES AND LIMITATIONS

Over the course of the Ontario Men's Survey, there were many challenges that resulted in changes to the original timeline for the project.

Questionnaire Development

In the development of the Ontario Men's Survey questionnaire, some of the challenges that contributed to a delay in the finalising of the questionnaire resulted from:

- The need to match and be able to make comparisons with other research. To make direct comparisons, it was necessary to pay special attention to the wording of questions and also to obtain some questions from international research collaborators.
- The incorporation of questions to assist in the evaluation of The AIDS Committee of Toronto's "Welcome to Condom Country" social-marketing campaign (see Appendix 6). These questions were developed with extensive external consultation. It was necessary to integrate questions, refine, then negotiate changes because of the space limitations of the questionnaire.
- Translation. As the task of questionnaire translation developed, many challenges emerged that affected progress to varying degrees.
- The inclusion of questions on perceived racism. There were no suitable questions on perceived racism available for direct integration into the Ontario Men's Survey. Permission was secured to adapt a series of questions from a U.S. study of Hispanic men (Diaz et al, 2001). The adapted questions related race and ethnicity to feeling discomfort in gay community venues, having trouble finding a boyfriend, attention given by sex partners to racial background rather than to the person, frequency of being turned down and obligation to engage in unwanted sexual acts. In addition, respondents were asked if they had a preference for sex partners from their own or a different ethnicity or race. Achieving consensus throughout the development of these questions presented significant challenges. While the inclusion of racism-related questions and multiple translations in the Ontario Men's Survey is a significant undertaking, and highly warranted, a clear opportunity remains for additional research in this area.

Pre-Testing

Many sections of the Ontario Men's Survey originate from other research. These questions had already been assessed for reliability and validity. For newly developed questions, such as those on the "Welcome to Condom Country" prevention campaign and perceptions of racism questions described above, there was limited time to undertake a pre-test. The

provincial and Toronto committees helped to assess face and content validity. However, questions were not subjected to a test-retest reliability estimation. There was also a need to incorporate the concerns of co-investigators and community advisors, and subsequently to deal in a timely way with the questionnaire design, translation and printing processes. These all remain limitations of the current study.

Choice of Languages/Translation

The population of Ontario is very diverse, which makes selecting a subset of languages difficult. Eventually the need for translation and validation of research instruments led the research team to select those languages represented by the Toronto-area ethno-cultural AIDS Service Organisations. This was not straightforward. For example, Asian Community AIDS Services (ACAS) and the Alliance for South Asian AIDS Prevention (ASAP) both serve groups that speak several languages. There was a delay as these groups considered their own resources and made their recommendations for the target languages for translation.

The technical aspects of translation presented several difficulties. Many colloquial terms used by English-speaking gay and bisexual men, such as “bear” and “circuit party men,” could not be readily converted into other languages. In these cases, translators were asked to provide a literal definition of the term and sometimes to include the English slang term as well. Individuals doing the validation were instructed to verify that the meaning was unchanged.

Translated questionnaires were set out in parallel bilingual format—a challenge for the design layout. The need for alternate character sets further added to the complexity. Additional time was required for editing, checking line breaks and checking alignment. To our knowledge no previous study of this population in Canada or elsewhere has translated a questionnaire into this number of other languages.

Additional Challenges

A number of other structural and contextual factors imposed additional challenge. Saliva collection devices were received late from the supplier in the United States and this caused a delay in the start of data collection. In addition questionnaire printing was delayed for reasons of inclusion and modification of questions pertaining to ethno-cultural issues and the condom country prevention campaign. The research team supplied local co-ordinators with photocopied, hand-bound versions of the questionnaire until the final printed materials were available.

Originally, three months were planned for data collection. This period did not change. However, as a result of other delays, the start-up fell during the winter and New Year’s holiday in December 2001. Only a few communities began data collection in December; most started in January.

Provincial Employees Strike

The Ontario Public Service Employees Union was engaged in a five-week labour dispute from February to April 2002. This strike included staff at the Public Health Laboratory where the Ontario Men's Survey saliva specimens were to be tested for HIV antibodies. As a result, data collection proceeded more slowly for a few weeks as the research team made alternate arrangements for the shipping and storage of collected saliva samples.

Local Co-ordination and Volunteer Staffing

Volunteer training was delayed, and there were changes in local co-ordination. In one region the initial volunteer training was cancelled and had to be rescheduled, which caused a short delay. In another region a local co-ordinator resigned during data collection. There was a short delay while a new local co-ordinator was trained.

There was a slight delay in the hiring of local co-ordinators in Toronto. Co-ordinators were not hired in time to participate in the December 8–9 training. Separate training sessions were held.

Falsification of Data by One Local Co-ordinator

In April 2002 the research team began coding the completed questionnaires. As they worked, they discovered that surveys submitted from one of the co-ordinators were irregular: obvious repeat patterns began to emerge, and it appeared as if proper data collection procedures were not being followed.

It took time to examine all the surveys collected by the co-ordinator, and to conclude that falsification had occurred. Delays were experienced while the research team determined if it was feasible or even possible to salvage any of the data. In the interest of maintaining the integrity of the study and confidence in the results, all the surveys collected by this co-ordinator were removed.

Upon confrontation, the local co-ordinator in question resigned from the project and was not involved in any subsequent data collection. The researchers returned to the field to make up the spoiled numbers. As a result 960 surveys and 484 saliva samples were removed and data collection in Toronto was extended until the middle of June 2002. Replacement surveys were secured for all discarded ones, and a final sample size of 5,080 surveys (a result above the target of 5,000) was achieved.

DATA ANALYSIS

The analysis of data for a study of this size is complex. Many factors influence not only what is analysed, but also how results are reported. Ultimately, a venue-based study like this is limited to the goodwill and generosity of the venues and men who participate. Hundreds if not thousands of questions could be asked about who the men are, how they perceive themselves, what their sexual preferences are, what they believe in, what kinds of behaviour they participate in and why. However, the research team was very aware of the amount of time men and the venues could be expected to donate. So, for every component—or type of information—reported in this section, there are dozens if not hundreds of components that are not included simply because of restrictions of resources—time or attention or funding.

During the processes of data analysis, many different types of relationships were explored, and there were many relationships found—far too many to include in a document of this type. This is a community-based, province-wide study, funded in large part by the Ontario Ministry of Health and Long-Term Care. Our primary responsibility was to report data that would present a provincial picture.

It is clear both from the analysis and from the experiences of the researchers, project director, research staff, advisory committee and local co-ordinators that not all parts of the province are equal and not all men's experiences are the same. Large cities, such as Toronto and Ottawa, offer a much wider array of venues and opportunities for sexual activity and community affiliation than do more rural and remote areas. Our preliminary analyses show that these urban, rural and regional variations represent some of the strongest trends and provide some of the most critical information for service delivery and prevention activity in the province.

THE PROVINCIAL PICTURE

For the most part the data collected and presented in this report are grouped into four regions: Toronto, Ottawa, Southern Ontario and Northern Ontario. In all tables, summary information is presented for the province of Ontario as a whole, to allow for easy comparisons between the whole province and the regions. Data are not presented for each of the 13 regions because, as sample sizes become smaller, there may be much greater variation in the data. The percentages may be unduly influenced by a smaller number of respondents, which may be misleading. Because the data are not a true random sample, most likely, with smaller regional samples, differences reflect not behaviour but slight variations in sampling and approach to recruitment. Also, when working with smaller sample sizes, we must be careful to avoid identifying individuals. In the presentation of the data, percentages are used. Because of the sample size, statistical procedures were not applied, allowing the data to speak for themselves and

therefore suggest trends or patterns. All of these differences may not be statistically significant.

In general, this report is organised according to the sections of the questionnaire. In addition to the basic information reported here, other information will be culled from the study, and future reports and specific analyses will be prepared, and updates on these analyses will be posted on the study website: www.mens-survey.ca.

Certainly there is important information about differences between HIV positive and HIV negative men, between men of different ages, between men of different racial or ethno-cultural communities, and between men with different sexual preferences, levels of community affiliation and sexual identities. It's important to analyse and understand these differences. The research team will continue to analyse and report from this study through community presentations and forums, conference presentations and papers, writings in academic journals, books and the popular press. A selected list of presentations to date is included in Appendix 8.

When the laboratory analysis of the saliva for hepatitis C (HCV) has been completed, the Ontario Men's Survey plans to visit each of the participating communities to discuss the entire study results, implications and suggestions for future research.

RESULTS

RESPONSE

In total, 5,080 men participated in the Ontario Men's Survey. This number surpassed the target sample of 5,000. Table 1 shows the projected sample size and the actual number of survey respondents recruited in each community. Originally the sample size was estimated in consultation with representatives from each community. More than 60% of the sample was recruited in the province's two largest metropolitan areas, Toronto and Ottawa. Almost 8% was recruited in Northern Ontario (Sudbury and Thunder Bay), and the remaining 32% was recruited in Southern Ontario, which includes the Durham (Oshawa) and Peel (Mississauga) regions.

As explained earlier, for the purposes of this report, the 13 regions listed in the table were grouped into larger regions for the analysis: Toronto (N=2,428, 47.8% of total sample); Ottawa (N=602, 11.9%); Southern Ontario, including Durham, Hamilton, Kitchener, Kingston, London, Peel, Peterborough, Saint Catharines and Windsor (N=1,707, 33.6%); and Northern Ontario, including Sudbury and Thunder Bay (N=343, 6.8%). Because of variations in the number responding to each question, the number (N) on which percentages are based within each table may differ. Note: for a small minority of men the place of recruitment may not represent the residence of the individual.

TABLE 1
SAMPLE SIZES OBTAINED IN THE ONTARIO MEN'S SURVEY

CITY OR REGION	SAMPLE SIZE (PROJECTED)	SAMPLE SIZE (OBTAINED)			SAMPLE SIZE 1991*
		QUESTIONNAIRES	SALIVA SAMPLES	% PROVIDING SALIVA	
Hamilton	300	307	224	73.0	109
Kingston	200	200	146	73.0	20
Kitchener	300	201	104	51.7	80
London	600	300	228	76.0	68
Peel	250	150	134	89.3	N/A
Durham	300	146	72	49.3	46
Ottawa	75	602	441	73.3	168
Peterborough	200	78	58	74.4	25
Niagara	200	200	177	88.5	68
Sudbury	125	238	192	80.7	33
Thunder Bay	200	105	82	78.1	25
Toronto	2,100	2,428	1,689	69.2	687
Windsor	150	125	88	70.4	85
Total	5,000	5,080	3,635	71.6	1,381

* NATIONAL MEN'S SURVEY

TABLE 2
TYPE OF DATA COLLECTION VENUE BY REGION (N=5,080)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Bar	77.7	54.0	62.7	74.6	69.6
Bathhouse	13.7	5.0	6.6	0.0	9.4
Community Group	8.6	11.0	30.7	25.1	21.0
(N)	2,428	602	1,707	343	5,080

Table 2 shows the proportion of men recruited in different types of venues within each region. In total, 69.6% of the 5,080 men were recruited in bars, 9.4% in bathhouses and 21.0% through community groups. There was some variation. Toronto had the largest proportion of men recruited in bars, and Ottawa the least. Conversely, Ottawa had the largest proportion of men recruited through community groups and Toronto the least. A greater proportion of Toronto men were recruited through bathhouses than in other regions—a reflection of the greater diversity of sex-on-premise venues found in the Toronto area.

TABLE 3
HOW RESPONDENTS HEARD ABOUT THE STUDY

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
In a bar	50.4	32.7	40.1	46.6	44.6
Gay organisation	6.7	28.6	17.9	14.6	13.6
Advertisement in gay press	11.9	19.3	9.7	5.2	11.6
Coaster in a bar	8.4	9.0	13.8	15.5	10.8
A friend	5.3	7.8	13.4	22.2	9.4
Poster	5.8	10.8	10.5	12.0	8.4
Article in gay press	6.4	13.8	5.0	3.2	6.6
In a bathhouse	10.0	3.2	4.3	0.3	6.6
OMS Information handout	4.4	11.3	7.4	7.6	6.4
AIDS Service Organisation	3.8	6.5	7.8	10.8	5.9
Postcard	3.0	3.0	3.9	3.5	3.3
Mainstream press	2.3	2.0	2.1	0.6	2.1
Personal ad	1.2	0.5	1.2	0.9	1.1
Television or radio	0.8	0.7	0.8	0.9	0.8
Other	4.9	3.7	4.6	8.2	4.8

Promotion was an essential part of the Ontario Men's Survey. One question asked how men heard about and were recruited to the study. Men could select more than one

response. Almost 45% of men were recruited to the study by being directly approached in a bar; 13.6% were approached through a gay organisation or social club, 9.4% by a friend, and 6.6% in a bathhouse. Of the printed materials, advertisements in the gay press were the most frequently cited (11.6%), followed by coasters in bars (10.8%), posters (8.4%), articles in the gay press (6.6%) and information handouts (6.4%). Advertisements were infrequently reported (television or radio 0.8%; personal classified ads 1.1%).

In Toronto, most men reported that they were approached personally in a bar; in Ottawa, advertisements, posters and articles in the gay press, being approached through a gay organisation and seeing the information handout were also very effective. In general, men from Southern and Northern Ontario were recruited by being directly approached in bars and through gay organisations or friends. They also found printed materials such as coasters, posters and the Ontario Men's Survey handout effective.

THE RESPONDENTS

Table 4 shows the age of the respondents in the Ontario Men's Survey by region. The range of ages of men in the survey reflects a real cross section of the community. A greater proportion of men aged 20 or younger (6.7%) and older men 50 years of age or greater (11.3%) were recruited in this study than in previous studies in similar populations in Canada. This may reflect two influences: social change within some Canadian communities that impact the ease with which younger men are able to come out and participate through community venues, and the fact that due to more effective treatments, men with HIV may now have the potential to live longer lives. In general, more of the very youngest men were recruited in Toronto and Southern Ontario, and a greater proportion of the older men were recruited in Ottawa.

TABLE 4
AGE OF THE RESPONDENTS (N=4,945)

	TORONTO	OTTAWA	S. ONTARIO	N. ONTARIO	ONTARIO
	%	%	%	%	%
20 or younger	6.7	3.6	7.9	5.6	6.7
21-30	29.3	27.1	35.2	32.0	31.2
31-40	35.4	30.9	27.5	32.3	32.0
41-50	19.2	21.4	16.9	21.1	18.8
50 or older	9.4	17.0	12.5	9.1	11.3
(N)	2,343	583	1,678	341	4,945

In previous surveys, greater proportions of younger men were recruited in rural areas and communities than in urban areas, and it was assumed that many would remain in smaller communities to attend high school, then migrate to larger urban areas to live in definable gay communities.

TABLE 5
FIRST LANGUAGE OF RESPONDENTS (N=5,043)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
English	76.6	67.7	87.2	76.1	79.1
French	5.2	26.3	4.3	19.2	8.3
Chinese	3.6	0.5	0.6	0.0	2.0
Portuguese	1.9	0.2	0.8	0.3	1.2
Spanish	3.6	1.3	1.1	0.3	2.3
Tamil	0.2	0.0	0.0	0.0	0.1
Vietnamese	0.6	0.2	0.1	0.3	0.4
Other	8.3	3.8	5.9	3.8	6.7
(N)	2,406	600	1,698	339	5,043

As shown in Table 5, approximately 80% of the total sample spoke English as a first language, and 8% spoke French. English was the first language spoken by 67.7% in Ottawa, and by 87.2% in Southern Ontario. French was the first language of 26.3% respondents in Ottawa, of 19.2% in Northern Ontario, of 5.2% in Toronto and of 4.3% in Southern Ontario. In Ontario, 12.6% of the sample spoke a first language other than English or French. This varied from 18.2% of the Toronto sample and 8.5% in Southern Ontario, 4.7% in Northern Ontario and 6.0% in Ottawa. Spanish was the first language for 2.3% of the provincial sample (highest in Toronto); Chinese was the first language of 2.0% of the sample (also highest in Toronto). Sixty men (1.2%) spoke Portuguese as a first language; 45 of these were recruited in Toronto.

Despite the sizeable proportion who spoke a language other than English or French, a very small proportion (about 1%; n=51), completed the survey in one of the languages into which it was translated. The largest number of men who completed the survey in another language spoke Spanish (63%, 32/51). Those who completed the survey in Chinese, Portuguese, Tamil and Vietnamese were less than 0.1% of the total sample of 5,080.

Table 6 shows the income distribution of the respondents in each of the regions. As expected, men in Ottawa and Toronto tended to report higher incomes than men in Northern and Southern Ontario. The highest proportions of the very poorest men were found in the South and the North, and the highest percent of the wealthiest men in the sample were recruited in Ottawa and Toronto.

TABLE 6
INCOME OF THE RESPONDENTS (N=4,920)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Less than \$10,000	12.5	10.1	17.2	14.3	13.9
\$10,000–\$19,999	13.4	9.8	17.8	16.4	14.7
\$20,000–\$29,999	14.1	10.8	14.5	13.7	13.8
\$30,000–\$39,999	17.1	16.3	16.4	20.8	17.0
\$40,000–\$49,999	11.5	14.8	11.1	11.6	11.8
\$50,000–\$59,999	9.3	12.2	8.7	7.4	9.3
\$60,000–\$69,999	7.3	7.4	5.1	6.8	6.5
\$70,000–\$79,999	4.5	6.5	3.8	2.7	4.4
\$80,000–\$89,999	2.7	5.3	1.9	2.4	2.7
\$90,000–\$99,999	1.7	1.9	0.7	0.9	1.3
\$100,000 or more	5.9	5.0	2.8	3.0	4.6
(N)	2,348	583	1,653	336	4,920

As shown in Table 7, less than one percent of respondents did not finish elementary school, and about 9% did not complete secondary school. Fifteen percent completed secondary school, 27% had some college or university; 36.2% completed college or university, and more than 13.4% reported some graduate studies or a post-graduate degree. Levels of education were fairly similar across the province. A somewhat greater proportion of men with post-graduate degrees were recruited in Toronto and Ottawa. Levels of education may be related to age of population. In general, cross sectional survey samples of men recruited through Canadian venues are fairly well educated, and our sample reflects this.

TABLE 7
HIGHEST LEVEL OF EDUCATION OF THE RESPONDENTS (N=5,051)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Elementary	1.0	0.3	0.8	0.9	0.8
Some secondary	7.1	6.8	8.7	8.8	7.7
Completed secondary	13.2	11.6	18.3	15.8	14.9
Some college/uni	25.1	23.1	31.6	24.9	27.0
Completed college/uni	38.8	37.4	31.5	38.3	36.2
Graduate education	14.8	20.6	9.1	11.4	13.4
(N)	2,411	601	1,697	342	5,051

TABLE 8
CURRENT WORK STATUS OF THE RESPONDENTS (N=5,029)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Employed full-time	62.1	65.5	57.4	58.4	60.7
Employed part-time	15.3	11.4	16.1	14.7	15.1
Unemployed	10.2	8.1	10.2	10.0	9.9
Retired	3.4	6.1	3.4	2.7	3.7
On disability	4.4	4.0	5.6	6.8	4.9
Other	4.7	4.9	7.2	7.4	5.7
(N)	2,403	595	1,692	339	5,029

Table 8 shows the current work or employment status of the respondents. Rates of employment were predictable. Men in larger urban centres were more likely to be employed full-time than men in Southern or Northern Ontario, although unemployment rates were fairly standard across the province. Members of the study's community advisory committee were surprised by the proportions of men on disability and by the finding that larger proportions of men in Northern Ontario (6.8%) and Southern Ontario (5.6%) were on disability than men in Toronto (4.4%) and Ottawa (4.0%). This may have something to do with recruitment, or it may reflect a return to a home community.

TABLE 9
FULL AND PART-TIME STUDENTS (N=4,952)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Yes, full-time	11.7	11.9	16.4	12.6	13.4
Yes, part-time	7.4	6.0	6.3	7.9	6.9
No	80.9	82.1	77.3	79.5	79.7
(N)	2,347	588	1,675	342	4,952

Table 9 shows the percentages of respondents who were students.

TABLE 10
RACE OF THE RESPONDENTS (N=4,901)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
White/Caucasian	75.6	92.1	91.2	90.2	83.9
Chinese	5.4	1.5	1.1	0.0	3.1
South Asian	3.2	0.7	0.7	0.3	1.9
Black	4.4	1.4	1.8	0.6	2.9
Aboriginal	1.7	1.2	2.7	7.4	2.4
Arab/West Asian	1.2	1.0	0.4	0.0	0.8
Filipino	3.1	0.5	0.5	0.0	1.7
South East Asian	1.3	0.5	0.1	0.3	0.7
Latin American	3.5	1.0	1.3	0.9	2.2
Japanese	0.3	0.2	0.1	0.3	0.2
Korean	0.4	0.0	0.1	0.0	0.2
(N)	2,316	592	1,655	338	4,901

Men were asked to indicate their racial origin by answering: *to which racial group do you belong*. In this study race was measured as distinct from ethnicity; questions about ethnicity were asked in an open-ended style using questions and wording from the 2001 Canadian census. These findings will be reported elsewhere due to the complexity of the analysis.

The most diverse group of men were recruited in Toronto, where about a quarter of the recruits did not have a white or Caucasian heritage. In the samples from Ottawa and Northern and Southern Ontario, 9.8% or less were not Caucasian.

In the province as a whole, the largest non-Caucasian racial groups were Chinese (3.1%), Black (2.9%), Aboriginal (2.4%) and Latin American (2.2%). By region, the Aboriginal community of Northern Ontario was 7.4% of the men recruited. Aboriginal men were also proportionately the largest non-Caucasian community in Southern Ontario at 2.7% of respondents.

Ottawa did not reflect as great a cultural diversity as Toronto. The Toronto sample's greater diversity reflects the ethno-cultural makeup of the city, as well as the efforts of a number of ethno-specific AIDS Service Organisations who assisted in recruitment and study development. In the Toronto sample, more than 5% identified their racial heritage as Chinese; 4.4% were Black; 3.5% were Latin American; 3.2% South Asian; and 3.1% were Filipino.

Aboriginal men were asked how they identified themselves, and also how the federal government identified them—that is, whether they were registered aboriginals as defined by the Indian Act of Canada. In the province as a whole, 3.1% of respondents indicated they were registered Aboriginal. In Northern Ontario, 6.3% were registered; in Southern Ontario there were 3.3%, and in Toronto and Ottawa there were 2.6%.

More than 20% of the sample of men recruited into the study were born outside Canada: 6.3% in Northern Ontario, 11.7% in Ottawa, 13.7% in Southern Ontario and 30.2% in Toronto.

Also, respondents were asked whether they were residents of Canada. Overall, 4.5% indicated that they were not Canadian residents. The highest percent of these respondents were in Toronto (5.6%); 4.7% in Northern Ontario; 4.4% in Southern Ontario; 0.8% in Ottawa.

SEXUAL IDENTITY AND SOCIALISING

Men were asked how they identified themselves: gay, bisexual, straight or in another way. Overall, as shown in Table 11, 83.0% of men in the survey identified themselves as gay, 12.5% as bisexual and 2.6% as straight, with little variation across the province. The largest proportion of men who identified themselves as gay was recruited in Ottawa.

TABLE 11
SEXUAL IDENTITY OF THE RESPONDENTS (N=4,955)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Gay	82.9	89.7	80.8	83.2	83.0
Straight	2.3	0.4	3.8	2.4	2.6
Bisexual	13.0	8.2	13.3	12.6	12.5
Other	1.8	1.3	2.0	1.8	1.8
(N)	2,350	594	1,671	340	4,955

Questions were asked to ascertain the community affiliation and attachment of respondents. These questions included frequency of attendance at bars (see Table 12 for gay bars; see Table 13 for straight bars) and bathhouses (Table 14), attending gay dances (Table 15), memberships in community groups and affiliation with HIV and AIDS related organisations (Table 16). Almost half the sample said they attended a gay bar at least one or two times a week; 27.5% said they went one to three times a month. Less than 4% of men never went to a gay bar, and about a quarter indicated that they went less than once a month. Men from larger urban areas seemed to go to bars more frequently than men from Northern or Southern Ontario, apparently because urban areas have more bars. Remember that many of the venues used for recruitment were

bars. Variations in attendance between regions may reflect the strategy of recruitment used by local co-ordinators. Local co-ordinators were asked to scan their community and recruit according to existing patterns of socialising within the community. In some cases, it was difficult to follow this strategy because of seasonal variation and availability of volunteer recruiters.

TABLE 12
SOCIALISING WITHIN THE GAY COMMUNITY:
FREQUENCY OF ATTENDANCE AT GAY BARS (N=4,965)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
3 or more times a week	19.5	17.5	13.3	6.8	16.3
1 to 2 times a week	32.1	30.4	26.1	22.2	29.2
1 to 3 times a month	27.1	22.9	28.5	34.0	27.5
Less than once a month	12.6	13.9	16.9	21.3	14.8
Once or twice a year	6.2	11.6	10.9	11.2	8.8
Never	2.5	3.7	4.3	4.4	3.4
(N)	2,360	595	1,672	338	4,965

As shown in Table 13, almost 20% of respondents never went to straight bars, while almost 35% went at least once a month. There was more frequent attendance at straight bars was in Northern and Southern Ontario than in Ottawa and Toronto. Again, there are more gay bars in the large urban areas.

TABLE 13
SOCIALISING: FREQUENCY OF ATTENDANCE AT STRAIGHT BARS
(N=4,951)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
3 or more times a week	4.6	3.0	6.4	7.7	5.2
1 to 2 times a week	9.8	9.4	11.6	10.6	10.4
1 to 3 times a month	18.3	20.4	19.0	21.2	19.0
Less than once a month	22.5	20.0	19.9	18.9	100.0
Once or twice a year	24.9	24.6	24.3	25.1	24.7
Never	19.9	22.6	18.8	16.5	19.6
(N)	2,349	594	1,669	339	4,951

TABLE 14
SOCIALISING WITHIN THE GAY COMMUNITY:
FREQUENCY OF ATTENDANCE AT BATHHOUSE (N=4,943)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
3 or more times a week	2.1	0.8	1.1	0.6	1.5
1 to 2 times a week	5.8	1.7	1.5	0.6	3.5
1 to 3 times a month	12.9	7.3	5.9	1.8	9.1
Less than once a month	16.2	11.2	7.8	3.8	11.9
Once or twice a year	20.2	23.6	19.8	20.1	20.5
Never	42.8	55.4	63.9	73.2	53.5
(N)	2,341	590	1,673	339	4,943

Not every community has a bathhouse, and this fact is reflected in the table describing frequency of bathhouse attendance (See Table 14). More than half the sample (53.5%) never attended bathhouses; more than 32% attended at least once a year, and almost 15% attended more than once a month. Men in Toronto reported attending bathhouses more frequently than men in Ottawa, Southern Ontario or Northern Ontario.

TABLE 15
SOCIALISING WITHIN THE GAY COMMUNITY:
FREQUENCY OF ATTENDANCE AT LGBT DANCES (N=4,950)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
3 or more times a week	3.8	3.0	3.2	2.1	3.4
1 to 2 times a week	9.3	5.9	6.9	4.1	7.7
1 to 3 times a month	21.0	14.0	19.1	27.4	19.9
Less than once a month	23.1	26.2	23.5	18.5	23.3
Once or twice a year	27.1	37.8	31.2	31.2	30.1
Never	15.7	13.0	16.2	16.8	15.6
(N)	2,342	592	1,676	340	4,950

Of all areas of the province, the Northern Ontario cities of Sudbury and Thunder Bay offer the least access to gay-identified venues such as bars and bathhouses. Hence, as shown in Table 15, it is not surprising that men in the North reported attending gay dances and community events more frequently than men in other areas of the province. Across the province, 31% of respondents reported attending a gay dance at least once a month.

Men also were asked if they had any association with a gay or a bisexual group (see Table 16). More men were associated with a gay or bisexual group than with an AIDS-related group. Men recruited in Ottawa were more likely to be associated with a gay or bisexual group (38.4%) than men in Toronto (21.5%), Southern Ontario (26.0%) or Northern Ontario (20.6%). However, this may reflect survey recruitment practices.

TABLE 16
SOCIALISING: ASSOCIATION WITH AIDS-RELATED GROUP (N=4,951)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Yes	14.0	12.8	14.9	18.2	14.4
No	86.0	87.2	85.1	81.8	85.6
(N)	2,344	592	1,674	341	4,951

Overall, 14.4% were associated with an AIDS-related group. Greater proportions of men in the smaller communities of Northern Ontario (18.2%) were associated with an AIDS-related group than men from Southern Ontario (14.9%), Toronto (14.0%) or Ottawa (12.8%).

TABLE 17
NUMBER OF PEOPLE KNOWN TO HAVE DIED FROM AIDS (N=4,805)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
None	38.9	38.9	44.5	43.9	41.1
One	11.0	12.7	13.7	14.5	12.4
Two	11.2	11.5	10.6	11.6	11.1
Three	7.1	8.5	6.9	7.4	7.2
Four	4.3	3.2	3.8	3.3	4.0
Five	4.3	4.2	3.8	3.3	4.0
6–10	9.3	10.8	8.1	8.3	9.0
11–20	6.4	5.1	4.6	4.7	5.5
More than 20	7.4	5.1	3.9	3.3	5.6
(N)	2,280	566	1,622	337	4,805

As shown in Table 17, more than 40% of respondents had never known someone who died of AIDS. Slightly more than 30% had known between one and three people who died of AIDS. Responses were similar across the province.

TABLE 18
SOCIALISING WITHIN THE GAY COMMUNITY:
WHERE RESPONDENTS LOOK FOR SEX WITH MEN, LAST 12 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Gay bar	63.1	58.5	57.1	60.1	60.3
Internet	35.7	35.9	32.5	44.9	35.3
Bathhouse	40.1	30.2	22.5	16.0	31.4
Introduction from friends	24.4	26.1	22.4	28.0	24.2
House party	20.6	23.4	20.0	20.1	20.7
Gay dance party	23.3	15.9	17.1	22.4	20.3
Park or cruising area	16.1	18.9	14.9	14.0	15.9
Straight bar	10.7	11.1	14.4	18.4	12.5
Telephone chat lines	13.2	16.6	8.7	11.4	12.0
Personal ads	10.4	13.0	9.5	14.6	10.7
Public washroom	10.6	11.5	7.1	8.2	9.4
Shopping malls	8.3	9.3	8.0	10.8	8.5
Bookshop/video club	7.2	5.3	4.6	4.4	5.9

We asked men where they had looked for men to have sex with in the previous 12 months. About 60% of men reported looking for sex in gay bars, with little variation across the province. About 35% reported looking for men on the internet. The highest percent who searched the internet were in Northern Ontario. More than 30% reported looking for sex in bathhouses; this ranged from 16% of respondents in Northern Ontario, to more than 40% in Toronto. Almost 25% said they found sexual partners through introductions made by friends. Gay dance parties and house parties were also common places to find sex, followed by parks or cruising areas, then telephone chat lines. About 11% of men used personal ads to look for male sex partners. Less than 10% of men across the province looked for sex with men in public washrooms, shopping malls, bookshops or video clubs.

RESPONDENTS' SEXUAL LIFE AND BEHAVIOUR

The respondents were asked numerous questions about their sex life and sexual behaviour. Questions were asked in a number of different ways, and with different time frames, in order to elicit information that would permit comparison with other studies and surveys.

TABLE 19
LAST TIME RESPONDENT HAD SEX WITH A WOMAN (N=4,963)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Never	41.7	39.4	35.8	35.0	39.0
Within the last month	5.5	2.8	7.7	5.3	5.9
2-3 months ago	2.1	1.5	2.8	3.2	2.3
4-6 months ago	1.9	1.0	2.0	2.6	1.9
7-12 months ago	3.1	1.7	2.7	3.5	2.8
1-5 years ago	11.5	13.4	16.4	17.9	13.8
More than 5 years ago	34.3	40.2	32.6	32.4	34.3
(N)	2,355	597	1,671	340	4,963

TABLE 20
LAST TIME RESPONDENT HAD SEX WITH A MAN (N=4,939)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Never	3.8	2.7	6.4	3.3	4.5
Within the last month	77.2	77.1	66.9	69.2	73.2
2-3 months ago	7.8	8.5	11.9	11.5	9.5
4-6 months ago	3.3	5.0	4.4	5.6	4.0
7-12 months ago	3.1	3.4	4.1	3.8	3.5
1-5 years ago	3.3	3.0	4.6	5.0	3.8
More than 5 years ago	1.6	0.3	1.7	1.5	1.5
(N)	2,338	597	1,666	338	4,939

Tables 19 and 20 show the last time respondents had sex with a man and with a woman. More than 60% of respondents indicated they had sex with a woman at least once in their lifetime. However, 35% had not had sex with a woman in the past five years. Men in Southern Ontario were more the most likely to report more recent sexual experiences with a woman followed by Northern Ontario, Toronto or Ottawa.

Of our sample recruited in gay bars and bathhouses and through community groups, 4.5% reported never having had sex with a man, and more than 5% had not had sex with a man within the previous year (see Table 20). Some of these were young men who presumably were just beginning to explore the gay community. However, the vast majority of men (73.2%) said they had sex with at least one man in the previous month. Men in Toronto and Ottawa were slightly more likely to report this than men in Southern or Northern Ontario. Men from Southern Ontario were the group reporting the lowest percent of sexual activity in the previous month. Yet about 66% still reported having had sex with a man in the previous month.

TABLE 21**NUMBER OF MALE SEX PARTNERS IN LAST 12 MONTHS (N=4,556)**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
One	19.1	27.5	29.4	29.3	24.2
2 to 4	28.9	28.2	32.4	41.5	30.8
5 to 9	18.6	17.3	17.9	16.1	18.0
10 to 14	8.9	10.8	7.4	3.5	8.3
15 to 19	6.3	5.3	4.0	1.9	5.1
20 to 29	4.7	3.7	3.3	3.5	4.0
30 or more	13.7	7.2	5.6	4.2	9.6
(N)	2,183	567	1,495	311	4,556

The number of male sexual partners in the previous 12 months varied across the province (see Table 21). Men in Toronto and Ottawa were more likely to report more sexual partners (greater than four) than men in less urban areas. These findings likely reflect a combination of factors, including the ease and availability of gay-identified venues through which to meet men, the relative size of the gay community and the availability of sex-specific sites such as bathhouses and cruising areas.

TABLE 22**LAST UNPROTECTED INSERTIVE ANAL SEX WITH A MAN (N=4,568)**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
In the last 3 months	28.3	28.1	28.0	36.0	28.7
4–6 months ago	5.9	4.8	5.5	4.1	5.5
7–12 months ago	5.3	5.1	5.8	6.9	5.6
More than 12 months ago	22.4	24.2	20.4	17.7	21.7
Never	38.1	37.7	40.3	35.3	38.6
(N)	2,178	565	1,508	317	4,568

Men were asked specific questions about the last event of insertive and receptive anal intercourse. Almost 40% of the sample had experienced at least one event of unprotected anal intercourse with another man in the previous year, and a greater proportion of men from Northern Ontario reported such encounters (see Table 22). Almost 29% said the experience took place in the previous 3 months, and again a higher proportion (36%) of these men were from Northern Ontario. More than 11% reported such an event between 3 and 12 months ago. More than 35% of the respondents said they had never experienced unprotected insertive anal intercourse.

The difference in experiences may be explained partly by the nature of relationships (Myers et al, 1999). In some regions of the province, where there may be fewer available sexual partners or opportunities for multiple sexual partners, men may be in closed relationships. Data in the study do not allow us to determine whether safety is negotiated, and if there are other reasons, such as a low sense of risk.

TABLE 23
LAST UNPROTECTED RECEPTIVE ANAL SEX WITH A MAN (N=4,562)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
In the last 3 months	24.4	24.6	24.4	27.1	24.6
4–6 months ago	5.8	4.4	4.7	7.6	5.4
7–12 months ago	5.0	4.1	5.1	3.5	4.8
More than 12 months ago	21.5	22.3	20.1	18.3	20.9
Never	43.4	44.6	45.7	43.5	44.3
(N)	2,172	565	1,508	317	4,562

TABLE 24
SEXUAL ACTIVITIES WITH REGULAR MALE PARTNER(S) IN PAST 3 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Deep tongue kissing	86.0	84.6	85.8	87.3	85.8
Mutual masturbation	80.2	82.0	80.4	85.6	80.9
Oral-Anal (Anilingus)	54.0	51.2	53.0	49.7	53.0
Oral sex-with condom (I)	20.2	12.2	17.0	19.9	18.1
Oral sex-no condom (I)	84.5	89.0	85.4	89.0	85.7
Oral sex-with condom (R)	18.0	9.0	14.3	17.1	15.6
Oral sex-no condom (R)	78.9	83.7	78.8	82.3	79.8
Anal sex-with condom (I)	49.7	31.4	42.3	43.6	44.4
Anal sex-no condom (I)	39.9	38.7	40.8	47.5	40.5
Anal sex-with condom (R)	39.3	26.2	34.2	37.0	35.7
Anal sex-no condom (R)	32.7	34.0	34.1	40.3	33.9

NOTE: I=INSERTIVE, R=RECEPTIVE

About a quarter of the men who completed the survey reported having receptive anal intercourse without a condom in the previous 3 months; about 10% more said they had such an experience in the past 3 to 12 months (see Table 23). Rates were similar across the province. There was a trend for men in Northern Ontario to report more recent

events of unprotected receptive anal intercourse. More than 44% of the men who answered the survey question said they had never engaged in unprotected receptive anal intercourse.

The National Men's Survey asked men about sexual activities with regular and casual partners but did not distinguish between these. The Ontario Men's Survey asked about specific sexual activities with regular and casual partners. A regular male partner was defined as a man the respondent had sex with on more than one occasion. Just over 55% of the men who reported sex in the previous three months had sex with at least one regular male partner. The highest percent reporting were in Ottawa (61.4%), followed by 57.8% in Northern Ontario; 55.5% in Toronto; 51.7% in Southern Ontario.

Specific sexual activities with regular partners are described in Table 24. Of the men who engaged in sexual activities with a regular male partner in the previous three months, approximately 80% had deep kissed, had mutual masturbation or had receptive oral sex without a condom. More than 85% had unprotected insertive oral sex. 53% had participated in oral-anal sex. Of respondents, 18.1% said they had protected insertive oral sex; 15.6% reported they had protected receptive oral sex. The unexpected high proportion who reported protected oral sex may in part be explained by the fact that oral sex and protected anal sex occur in combination. Approximately 44% reported engaging in protected insertive anal sex, and 35.7% reported protected receptive anal sex. In total, 40.5% of men reported at least one instance of unprotected insertive anal intercourse with at least one regular partner in the previous three months, and 33.9% reported at least one instance of unprotected receptive anal intercourse with a regular partner during the same time period.

Men in Northern Ontario were most likely to report at least one instance of unprotected insertive anal sex with a regular partner (47.5%), and men in Ottawa were least likely to report such activity (38.7%). Men in Northern Ontario also were most likely to report at least one instance of unprotected receptive anal sex with a regular partner (40.3%). Men in Toronto were least likely to report this (32.7%).

For the purposes of the study, casual sex partners were defined as men a respondent had sex with on one occasion only. Overall, of the men in the study who reported engaging in sexual activity in the previous three months, 57.1% reported sex with at least one casual male partner. There were some regional differences. Men in Toronto were most likely to report casual sex partners in the previous three months (63.7%); followed by Ottawa (56.5%), Southern Ontario (49.5%) and Northern Ontario (47.9%).

Of those who reported casual sex partners in the previous three months, 18% reported one casual partner only. The majority (45.7%) reported two to four partners; 16.6% reported five to nine partners, and 21.7% reported 10 or more casual partners. Men in Toronto and Ottawa tended to report a greater number of partners than men in other areas.

Of the men who had engaged in sexual activities with at least one casual male partner in the previous three months, approximately 78% had deep kissed and approximately 78% had mutually masturbated with a casual partner, and 40.3% had participated in

oral-anal sex (anilingus). Only 17% had performed oral sex with a condom; 14.4% had receptive oral sex with a condom. (This is a slightly lower proportion than for regular partners.) But 46.5% had had insertive anal sex with a condom, and 34.5% had had receptive anal sex with a condom. In total, 80.3% reported performing unprotected oral sex with a casual partner, and 73.2% reported receiving unprotected oral sex. Twenty-one percent of men with casual partners reported at least one instance of unprotected insertive anal intercourse with a casual partner in the previous three months, and 16.0% reported at least one instance of unprotected receptive anal intercourse with a casual partner in the same time period.

Men in Northern Ontario were most likely to report at least one instance of unprotected insertive anal sex with a casual partner (24.7%), and men in Ottawa were least likely to report this activity (17.0%). Men in Northern Ontario also were most likely to report at least one instance of unprotected receptive anal sex with a casual partner (17.3%), while men in Ottawa were least likely to report this (12.3%).

TABLE 25
SEXUAL ACTIVITIES WITH CASUAL PARTNER(S) IN PAST 3 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Deep tongue kissing	77.4	76.7	77.9	83.3	77.8
Mutual masturbation	76.5	82.1	77.7	78.7	77.6
Oral-Anal (Anilingus)	43.0	39.6	35.8	38.0	40.3
Oral sex—with condom (I)	18.4	13.5	15.4	19.3	17.0
Oral sex—no condom (I)	79.3	84.0	80.6	80.7	80.3
Oral sex—with condom (R)	16.0	11.0	12.1	18.0	14.4
Oral sex—no condom (R)	73.3	74.5	72.6	73.3	73.2
Anal sex—with condom (I)	51.1	38.7	41.4	45.3	46.5
Anal sex—no condom (I)	21.8	17.0	20.5	24.7	21.0
Anal sex—with condom (R)	36.6	28.9	33.4	32.0	34.5
Anal sex—no condom (R)	17.0	12.3	15.6	17.3	16.0

NOTE: I=INSERTIVE, R=RECEPTIVE

Men were asked to indicate the unprotected oral and anal sex they had with men in relation to their assumptions and knowledge of sexual partners' HIV status. As shown in Table 26, in the previous year, 37.5% had unprotected oral sex with a man they assumed to be HIV negative, and 36.6% had unprotected oral sex with a man they knew to be HIV negative. Only 6% had unprotected oral sex with a man they assumed to be HIV positive, and 6.9% had unprotected oral sex with a man they knew to be HIV positive. Men in Toronto and Ottawa reported higher percentages of unprotected oral sex with men assumed to be negative; men in Toronto reported higher rates of unprotected oral sex with men they assumed or knew to be HIV positive.

TABLE 26**UNPROTECTED ORAL SEX WITH A MAN IN LAST 12 MONTHS AND ASSUMPTIONS
AND KNOWLEDGE OF HIV STATUS**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Who you assumed was HIV negative	39.9	40.0	33.6	36.2	37.5
Who you knew was HIV negative	34.4	38.2	37.5	43.4	36.6
Who you assumed was HIV positive	8.2	3.7	4.3	3.5	6.0
Who you knew was HIV positive	8.9	5.3	5.1	5.2	6.9
Whose HIV status you did not know	45.1	41.4	36.3	31.8	40.8

As shown in Table 27, 18.4% had unprotected anal sex with a partner they assumed was HIV negative; 2.4% had unprotected anal sex with a partner they assumed was HIV positive. Almost 25% reported unprotected anal intercourse with a man they knew was HIV negative, and 3.9% reported unprotected anal sex with a man that they knew was HIV positive. In both situations, men were more likely to act on knowledge than on assumptions. The table does not permit us to assess how many made assumptions about partners' HIV status.

TABLE 27**UNPROTECTED ANAL SEX WITH A MAN IN LAST 12 MONTHS AND ASSUMPTIONS
AND KNOWLEDGE OF HIV STATUS**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Who you assumed was HIV negative	19.3	19.8	16.2	20.7	18.4
Who you knew was HIV negative	22.5	24.1	27.1	28.9	24.7
Who you assumed was HIV positive	3.6	0.8	1.5	1.2	2.4
Who you knew was HIV positive	5.2	2.0	2.8	3.2	3.9
Whose HIV status you did not know	18.7	15.0	15.2	13.4	16.7

We asked men about disclosure of their HIV status to casual sex partners in the previous three months (see Table 28). One quarter of men indicated they always disclosed their HIV status to casual sex partners, about 30% said they sometimes disclosed their status, and about 45% said they never did. A greater proportion of men in Northern Ontario and Southern Ontario report always disclosing their status to casual sex partners. Greater proportions of men in Toronto sometimes disclose their status. The highest proportion of men who never disclose their HIV status with casual sex partners was reported in the Ottawa region.

TABLE 28**DISCLOSURE OF HIV STATUS TO CASUAL PARTNERS, LAST 3 MONTHS
(N=2,532)**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Always	24.3	19.2	27.2	34.5	25.1
Sometimes	32.1	23.5	28.2	24.8	29.5
Never	43.6	57.3	44.6	40.7	45.4
(N)	1,363	307	717	145	2,532

HIV TESTING

Men were asked to indicate if they had ever had an HIV test, and 77.7% indicated that they had. Rates of being tested were highest in Ottawa (82.4%), followed by Toronto (79.4%) and Northern Ontario (78.5%). The lowest rate of testing was in Southern Ontario (73.4%).

Of those men who had been tested, almost 25% reported having one HIV test only (see Table 29). Another 45% indicated having between two and four HIV tests. There was a slight trend for men in Toronto and Ottawa to report more tests than men in other areas. Men were asked how frequently they were tested for HIV. One-quarter of men indicated they were not tested regularly for HIV (see Table 30). About once a year was the most frequently reported pattern of testing (21.8%); 19.6% of respondents said they went for a test about twice a year, 10.6% were tested about once every two years and 10.1% were tested more than twice a year.

TABLE 29**NUMBER OF HIV TESTS FOR MEN EVER HAVING BEEN TESTED (N=3,605)**

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
One	23.3	24.3	25.4	23.3	24.1
Two	19.8	19.4	22.1	21.7	20.6
Three	15.7	15.5	13.6	15.0	15.0
Four	9.7	8.4	10.8	13.0	10.1
Five	6.5	7.3	5.3	8.3	6.4
Six	7.2	7.7	7.0	6.3	7.2
7-10	10.6	10.8	8.8	6.3	9.7
11-20	5.9	5.4	6.2	4.7	5.9
More than 20	1.2	1.3	0.7	1.2	1.1
(N)	1,749	465	1,138	253	3,605

TABLE 30
FREQUENCY OF HIV TESTING OF MEN EVER HAVING BEEN TESTED
(N=3,555)

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
More than 2 times a year	10.2	6.0	11.2	12.3	10.1
About twice a year or every 6 months	20.0	16.4	19.5	23.3	19.6
About once a year or every 12 months	23.1	23.6	19.1	21.7	21.8
About once every 24 months	10.4	12.4	11.1	6.3	10.6
About once every 36 months	4.0	4.9	3.6	4.3	4.0
More than 3 years between tests	3.4	5.1	3.7	3.6	3.7
I don't test regularly for HIV	23.7	27.3	25.4	21.7	24.6
Don't know	5.1	4.2	6.4	6.7	5.5
(N)	1,717	450	1,135	253	3,555

Men who had never had an HIV test were asked to indicate all the reasons why they had never been tested. More than half said they had never tested for HIV because they considered themselves to be at low risk for infection; 30.1% reported that they always practised safer sex; 27.9% said they thought they were HIV negative; and 19.1% said they did not want to know; 18.5% said they had never had sex with an infected person; 13.9% said they could not deal with knowing they were HIV positive; 12.9% said they had never thought about it; 10.9% said it could affect their relationships; and 10.4% said they were healthy.

TABLE 31
REASONS FOR NOT HAVING AN HIV TEST

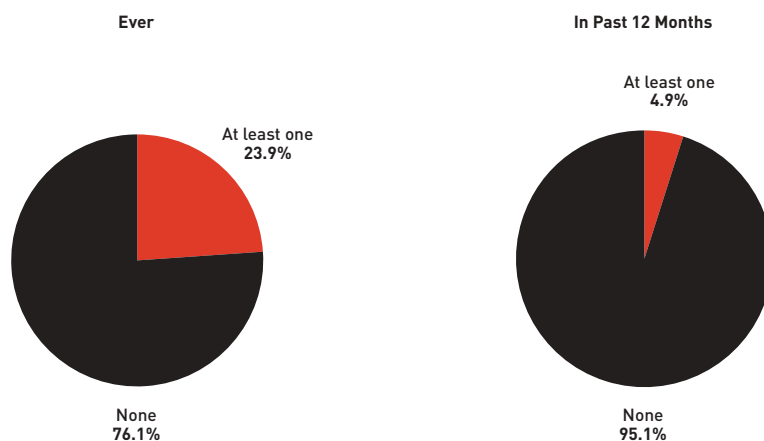
	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
I am at low risk for HIV infection	49.0	51.4	52.9	43.8	50.5
I always have safer sex	30.9	27.6	31.1	23.3	30.1
I think I am HIV negative	27.4	23.8	29.5	27.4	27.9
I don't want to know	20.2	21.0	17.6	19.2	19.1
No sex with HIV positive person	16.7	13.3	21.2	21.9	18.5
I could not deal	16.7	10.5	12.2	11.0	13.9
I have never thought about it	11.9	9.5	14.2	16.4	12.9
It could affect my relationships	11.5	10.5	10.1	12.3	10.9
I am healthy	9.5	13.3	11.3	6.8	10.4
Afraid of having my name reported	9.9	9.5	9.0	9.6	9.6
Others may discriminate against me	7.2	9.5	9.2	9.6	8.4
I am afraid of needles	9.7	3.8	8.1	6.8	8.3
I don't know where to get the test	7.2	5.7	8.6	6.8	7.6
Could affect career or insurance	7.2	7.6	6.5	11.0	7.2
Worried about impact on sex life	6.2	1.9	6.1	5.5	5.7
If HIV positive nothing could be done	5.6	5.7	4.5	4.1	5.1
I don't think I can get HIV	5.1	3.8	3.6	0.0	4.1
I think I am HIV positive	3.5	3.8	2.3	1.4	2.9
I don't think the test is always right	1.9	1.0	1.6	1.4	1.6

*FOR MEN WHO NEVER HAD AN HIV TEST

SEXUAL AND OTHER HEALTH ISSUES

The questionnaire contained a list of 11 sexually transmitted diseases and other infections. Men were asked to indicate if they had been told they had a sexually transmitted (STI) or other infection by a medical practitioner, in the past 12 months and if ever. Figure 1 shows the percentage of men who said they had ever had a sexually transmitted infection. Table 32 shows recent infections (in the previous 12 months). These data provide additional indication of the extent to which unprotected sexual activities may take place. Men in Ontario were most likely to report genital or anal warts (1.8%), penile gonorrhoea (1.6%) and chlamydia (1.4%) in the previous 12 months. Rates were highest in Toronto, and higher in Ottawa than in Southern Ontario or Northern Ontario. Of men in the sample, syphilis was reported by 0.4%, hepatitis C and B by 0.7%, and hepatitis A by 0.5%.

FIGURE 1
PERCENT OF RESPONDENTS REPORTING HAVING A SEXUALLY TRANSMITTED INFECTION EVER, AND IN PAST 12 MONTHS



The proportions of men reporting having ever had specific sexually transmitted (STI) and other infections were as follows: penile gonorrhoea (7.6%), genital and anal warts (6.7%), hepatitis B (4.3%), chlamydia (3.9%) and hepatitis A (3.7). Hepatitis C was reported by 1.7% of men, syphilis by 2.6%. Again the trend was for a greater percentage of men in Toronto and Ottawa to report STIs.

TABLE 32
SEXUALLY TRANSMITTED AND OTHER INFECTIONS REPORTED IN THE LAST 12 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Oral gonorrhoea	1.3	0.5	0.4	0.0	0.8
Rectal gonorrhoea	0.8	0.7	0.5	0.0	0.6
Penile gonorrhoea	2.4	1.0	0.8	0.6	1.6
Chlamydia	2.1	1.5	0.5	0.9	1.4
Genital or Anal warts	2.6	1.3	1.1	0.6	1.8
Syphilis	0.6	0.5	0.2	0.3	0.4
Genital herpes	0.7	1.2	0.6	0.6	0.7
Hepatitis A	0.7	0.3	0.4	0.0	0.5
Hepatitis B	0.9	1.2	0.6	0.0	0.7
Hepatitis C	0.7	0.5	0.8	0.0	0.7
Other	0.9	0.3	0.5	0.6	0.7

Almost 35% of the men who responded to the survey had not used any recreational drug in the previous 12 months. The most frequently used drugs were marijuana and hashish, reported by more than 45% of respondents. Almost 20% had used poppers; 18.6% had used ecstasy; 17.1% had used cocaine; and 11.8% had used special K (ketamine). In general, rates of drug use were higher in Toronto and Southern Ontario than in the other regions of the province.

TABLE 33
RECREATIONAL DRUG USE, LAST 12 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Marijuana/Hash	46.2	42.0	47.0	41.1	45.6
Poppers (e.g. amyl nitrate)	23.1	20.8	16.0	12.5	19.7
Ecstasy	22.9	12.0	16.5	10.5	18.6
Cocaine	20.6	14.1	14.1	12.2	17.1
Special K	15.7	5.5	9.9	5.5	11.8
Viagra	10.5	5.8	4.9	6.1	7.8
Amphetamines/speed	6.1	4.5	5.9	5.2	5.7
Tranquilizers (e.g. Valium)	5.7	4.8	5.0	7.3	5.5
GHB	6.6	1.3	5.0	4.1	5.3
Crack Cocaine	4.6	2.2	4.2	1.7	4.0
Psychedelics (e.g. LSD)	3.4	3.2	4.7	2.6	3.8
Speed ball	1.9	1.5	1.8	2.3	1.9
Opiates (other than Heroin)	1.7	1.2	2.2	2.0	1.9
Steroids	1.9	0.8	1.3	1.2	1.5
Barbiturates (e.g. Seconal)	1.1	1.0	1.8	1.2	1.3
Heroin	0.8	0.8	1.2	1.2	0.9
Solvents (e.g. gasoline)	0.5	0.0	0.4	0.3	0.4
No drugs in previous 12 months	31.3	37.0	36.7	42.3	34.5

PROVISION OF SALIVA AND HIV STATUS—PREVALENCE OF HIV

This is the first major survey conducted within the gay community in Ontario to attempt to determine the rate of HIV infection based on a biological specimen. The method was previously tested in the Winnipeg Men's Survey (Myers et al, 1995). In addition to the saliva sample, men were asked to report their HIV status. Out of the sample of 5,080 men, 3,683 (72.5%) disclosed their HIV status, and a slightly smaller number—3,635 (71.6%)—provided a saliva sample. Fewer men provided saliva in the Ontario Men's Survey than in the pilot Winnipeg Men's Survey, where 85.6% provided saliva. In studies of injection drug users in Toronto, up to 97.5% of participants, male and female, provided saliva (WHO Collaborative Group, 1993).

TABLE 34
PROVISION AND RESULTS OF SALIVA (N=5,080)

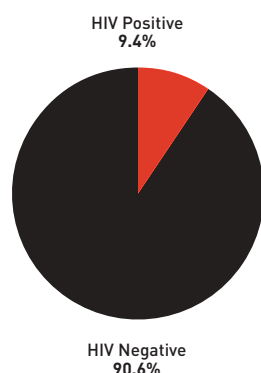
	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
HIV positive	8.3	3.5	5.3	3.2	6.4
HIV negative	60.6	69.6	66.5	76.7	64.7
Inconclusive/Insufficient	0.6	0.2	0.4	0.0	0.4
No saliva	30.4	26.7	27.9	20.1	28.4
(N)	2,428	602	1,707	343	5,080

There was some variation in the provision of saliva between regions. A relatively high proportion of men in Northern Ontario provided saliva (79.9%); 73.3% provided saliva in Ottawa, 72.1% in Southern Ontario, and 69.6% in Toronto (see Table 34).

In most cases, there was sufficient specimen collected to conduct the laboratory tests to detect the presence of HIV antibodies. In a very small number of cases (n=22; 0.4%) the sample was insufficient to determine an HIV status, or the laboratory test on the sample was inconclusive. Inconclusive results also may be an indication of a possible new infection (recent seroconverter)—in some cases new infections might not produce adequate concentration of the HIV antibody in saliva to be detected.

Out of the total study sample, the proportion of men testing HIV positive was 3.2% in Northern Ontario, 3.5% in Ottawa, 5.3% in Southern Ontario and 8.3% in Toronto. Overall, the provincial HIV-positive rate for all men participating in the study was 6.4%.

FIGURE 2
HIV PREVALENCE BASED ON SALIVA SAMPLE (N=3,387)



In Figure 2 we exclude men who did not provide a saliva sample, men who never had sex with a man, and laboratory results that were inconclusive. Of the remaining 3,387 men, 9.4% tested positive for the HIV antibodies.

To further describe the characteristics of HIV prevalent infections, a number of cross tabulations were made. These were conducted only for men for whom there was a viable saliva sample and who said they had had sex with a man.

FIGURE 3
PERCENT TESTING HIV ANTIBODY POSITIVE BY REGION

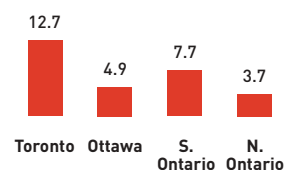
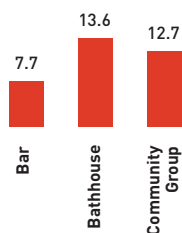


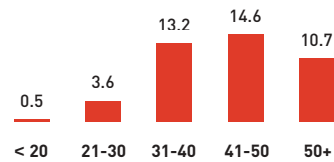
Figure 3 shows by region the percent of the sample who tested HIV antibody positive: in Toronto 12.7%; in Southern Ontario 7.7%; in Ottawa 4.9%; in Northern Ontario 3.7%.

FIGURE 4
PERCENT TESTING HIV ANTIBODY POSITIVE BY DATA COLLECTION VENUE



As the sample was a convenience sample, it is expected that some difference in HIV status may have been introduced by patterns of recruitment. The lowest percent of respondents who tested HIV-antibody positive (7.7%) were recruited in bars; compared to 13.6% recruited in bathhouses, and 12.5% recruited through community groups (see Figure 4).

FIGURE 5
PERCENT TESTING HIV ANTIBODY POSITIVE BY AGE GROUP



As shown in Figure 5, the highest percent of HIV positive men were in the 41–50 age group (14.6%) followed by men 31–40 years of age (13.2%) and men age 50 and older (10.7%). In previous surveys the highest HIV positive rate (based only on self-report) was in the 21–30 year age group, who would now be age 31–40. The higher rate may also reflect that with age (years of life), the chance of exposure to HIV may increase.

FIGURE 6
PERCENT TESTING HIV ANTIBODY POSITIVE BY LEVEL OF EDUCATION

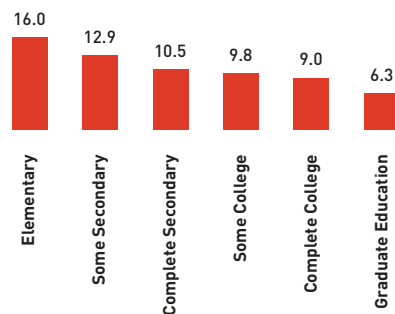


Figure 6 shows HIV positive status by level of education. There is a clear downward trend in rate of infection with years of education—i.e. the more educated the person, the less likelihood of infection. Sixteen percent of those with only elementary education were found to be HIV positive, compared to 6% of those with graduate education.

FIGURE 7
PERCENT TESTING HIV ANTIBODY POSITIVE BY SEXUAL IDENTITY

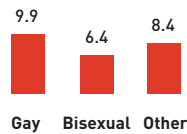
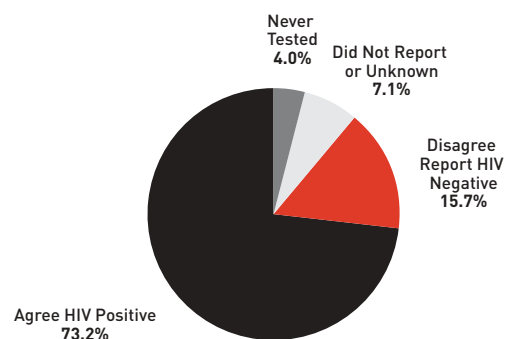


Figure 7 shows the percent testing HIV antibody positive by sexual identity. Of the two largest groups, the highest percent testing positive were gay (9.9%), followed by bisexual (6.4%). Among the small group of individuals who indicated an “other” sexual identity, 8.4% tested positive.

Unknown or Discrepant Reports

As shown in Figure 8, for men who tested HIV antibody positive with the biological specimen, there was 73.1% concordance with the self-reports. However, 15.7% of men whose saliva tested positive had reported that they were HIV negative. These men could have been unaware of their status, could have seroconverted since their last HIV test, or they could have given a false report. About seven percent did not answer the question or said they did not know the result of a test; 4.0% said they had never been tested for HIV.

FIGURE 8
AGREEMENT OF SELF-REPORT WITH HIV POSITIVE TEST RESULT FROM SALIVA

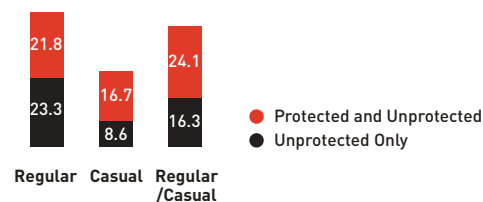


VARIATIONS IN LEVEL OF SEXUAL RISK

Previous sections of this report present a breakdown of key variables describing the survey population, behaviours and responses to HIV. In this next section, sexual activities described in tables 25 and 26 are grouped into a single variable reflecting different levels of sexual risk. To compare to the National Men’s Survey, a five-level measure of sexual activity (from safest to riskiest) was developed:

1. men who within the past three months reported only kissing;
2. men who reported only non-anal sex (oral sex, mutual masturbation);
3. men who reported anal intercourse that was always protected;
4. men who reported episodes of unprotected anal intercourse and protected anal intercourse; and
5. men who reported anal intercourse that was never protected.

FIGURE 9
PERCENT OF MEN REPORTING AT LEAST ONE EPISODE OF UNPROTECTED ANAL INTERCOURSE IN THE PAST 3 MONTHS



To simplify for analysis and comparison, unprotected receptive intercourse and unprotected insertive intercourse were grouped together as unprotected anal intercourse.

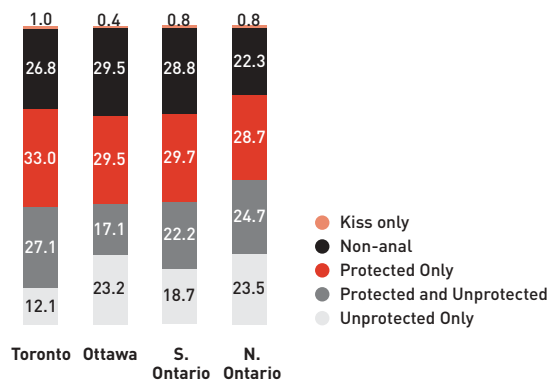
The results presented here only represent an initial descriptive picture of association between risk and variables. Often variables such as age, education, income and relationship status are inter-related. Therefore, a bivariate analysis, like the one presented here, is a limited way to explain behaviours.

The graphic format used to describe the relationship between sexual behaviour and other variables is similar to that used in the National Men’s Survey. In the current survey men responded to specific questions about both casual and regular sexual partners. Because of limited space, and to permit comparison with previous analyses, their answers concerning sexual activity with casual or regular partners, or both, are combined.

Level of sexual risk varied with key socio-demographic and other behavioural variables.

There was a distinct difference in the extent of risk behaviour reported with regular and with casual partners (see Figure 9). But the general pattern of high-risk behaviour varied across partner types in a similar way. When we define “sexual risk” as at least one episode of unprotected anal intercourse (numbers 4 and 5 in the above list) and compare findings from the Ontario Men’s Survey to the National Men’s Survey, we see an increase across time.

FIGURE 10
LEVEL OF SEXUAL RISK BY REGION (PAST 3 MONTHS)



There was some difference in the level of sexual risk across the regions (see Figure 10). In Northern Ontario 48.2% reported at least one episode of unprotected anal intercourse, compared to approximately 40% in Southern Ontario, Ottawa and Toronto. In part this may be accounted for by the percent of respondents who reported casual partners, which in the north was the lowest (47.9%), compared to 49.5% in the south, 56.5% in Ottawa, and 63.7% in Toronto.

FIGURE 11
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY FIRST LANGUAGE SPOKEN

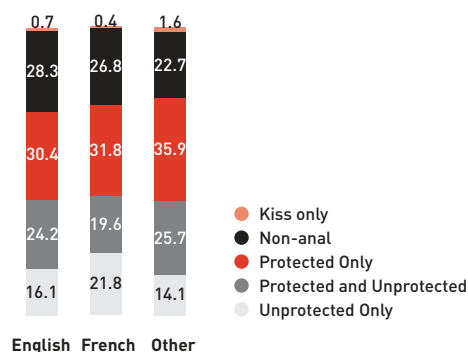


Figure 11 shows the relationship between level of sexual risk and the language a respondent first learned and still speaks. A slightly higher proportion of men who speak a language other than English or French engaged in forms of anal intercourse, but there was no difference in the proportion who reported at least one episode of unprotected anal sex. Those who spoke English reported the highest proportion of non-anal sex. In the National Men's Survey, those who spoke English had the lowest proportion of non-anal sex.

Self-identified racial groups did not significantly differ in terms of rates of unprotected anal sex.

Questions exploring perceived racism were asked of all men. Proportions of men self-identifying as visible minorities (non-Caucasian, see Table 10) reported a considerably higher percentage of perceived racism than Caucasian men, with some variation between racial identity groups. Between 46% and 68% of respondents identifying as a visible minority indicated that they had no preference for sexual partners of a specific race. Between 32% and 44% indicated a preference for male sexual partners from a different ethnicity or race.

Multivariate analysis found some association between men who expressed a preference for sexual partners of a given race and men who reported at least one incidence of unprotected anal sex in the previous three months. There is a clear need for further examination of these data. The race-specific questions asked in this survey were only a beginning of the questions that could be asked and may not have captured the complexity of the issues.

Figure 12 shows the level of sexual risk with age. Notice the trend for those in the older age groups (50 and older) and those aged 41 to 50 to report less anal intercourse. Of respondents aged 21 to 30, 43.7% reported at least one episode of unprotected anal intercourse. (To examine unprotected anal intercourse, we combined two categories: men who had both unprotected and protected anal sex, and men who had unprotected anal sex only.) Using the same combined categories, 44.6% of men aged 31 to 40 reported an episode of unprotected anal sex. In the National Men's Survey those age 20 and younger reported the highest level of unprotected anal intercourse. In the Ontario Men's Survey, the percent of unprotected anal intercourse for those 20 and younger was lower than reports from those aged 21 to 40. One possible explanation for this is the cohort effect: those men who were 20 at the time of the National Men's Survey are now 10 years older, and now belong to a different age group.

FIGURE 12
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY AGE GROUP

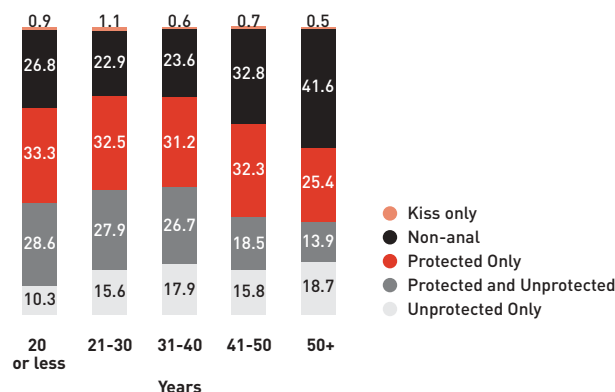
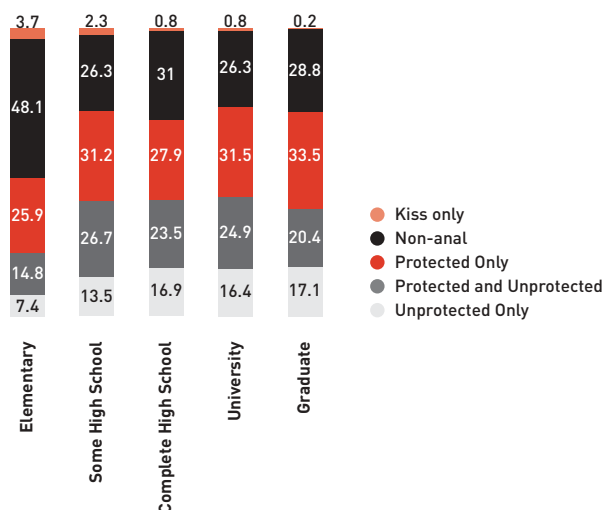


Figure 13 shows the relationship between level of sexual risk and level of education. Those with elementary education reported the lowest percent of anal sex (48.1%), compared, for example, to those with some high school, of whom 71.5 % reported anal sex. Those with only elementary-school education also had the lowest proportion reporting any episode of unprotected anal sex (22.2%), compared to, for example, those with some high school education (40.2%). Again, these results differ from the National Men's Survey, where more of those with only elementary education reported at least one episode of unprotected anal intercourse.

FIGURE 13
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY EDUCATION



The association of level of risk with income was less clear (see Figure 14). The highest proportion of anal intercourse was reported by those who earned between \$10,000 and \$19,999, and those who earned more than \$70,000. In general, those with high income reported high levels of unprotected anal sex. These data differ from the findings of the National Men's Survey, where those earning \$10,000 or less reported the highest level of unprotected anal intercourse.

FIGURE 14
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY INCOME

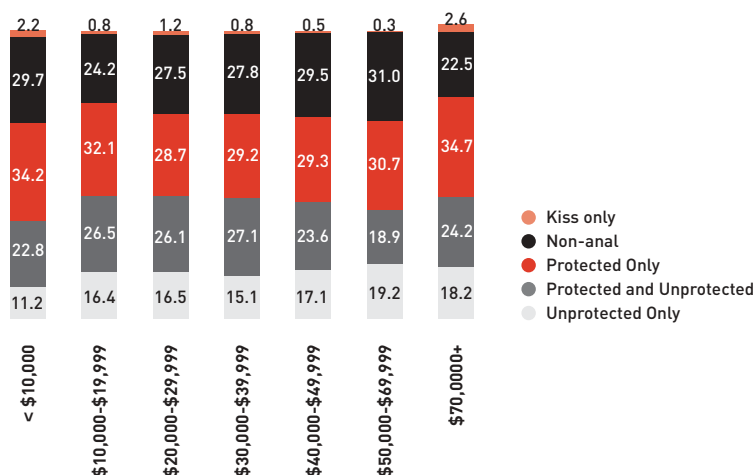


FIGURE 15
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY SOCIALIZING IN GAY BARS

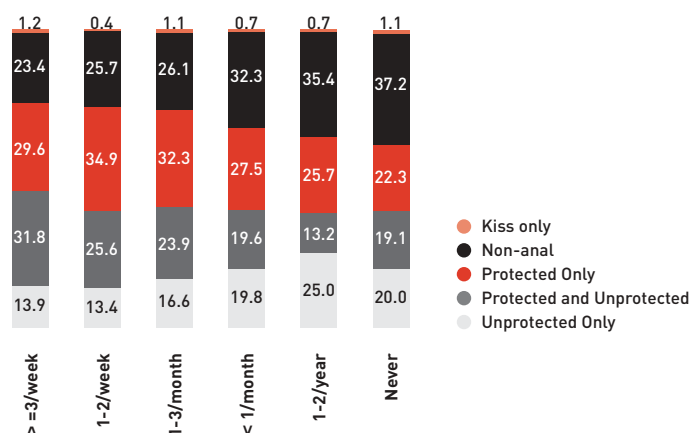
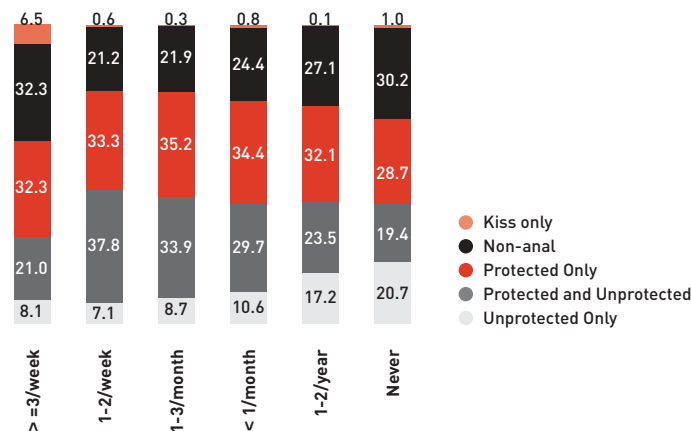
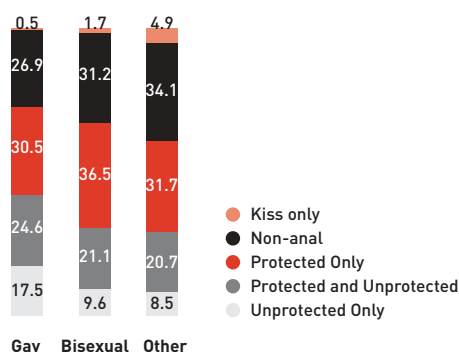


FIGURE 16
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY SOCIALIZING IN BATHHOUSES



Figures 15 and 16 show two measures of socializing in the gay community: attendance at bars and at bathhouses. Figure 15 shows that men who attend bars most frequently (three or more times a week) were the most likely to report at least one episode of unprotected anal sex. This pattern does not apply to those who attend bathhouses. The most regular bathhouse attendees (figure 16) were the least likely to report an episode of unprotected sex. Across the other frequency categories, there was little difference in reporting of at least one episode of unprotected anal sex. In both bars and bathhouses, there was a tendency for the percent of *unprotected anal sex only* to increase with a decrease in frequency of attendance.

FIGURE 17
LEVEL OF SEXUAL RISK (PAST 3 MONTHS) BY SEXUAL IDENTITY



In the National Men's Survey, the groups reporting the highest proportion of unprotected anal intercourse were the most frequent attendees of both bars and bathhouses.

Figure 17 shows the variation in level of sexual risk according to sexual identity of the respondents. Of men who identified themselves as gay, 42.1% reported at least one episode of unprotected anal intercourse in the past three months. Of men who identified themselves as bisexual, 30.7% reported at least one episode of unprotected anal intercourse in the past three months.

Table 35 showed the places where men look for their sexual partners. The three most popular places were gay bars, bathhouses and the internet. Table 35 includes men who reported looking for partners in each venue, and shows the percent reporting at least one episode of unprotected anal intercourse in the past three months for each type of venue. The table breaks down these percentages by casual partners only and regular or casual partners. The overall ranking of venues by level of sexual risk for the two partner groupings is similar. Remember that men may use multiple venues so it is difficult to distinguish risk behaviour by a particular type of venue. Because men do frequent different venues, it is difficult, from the data in this study, to substantiate a recent reported association between frequent internet use for finding partners and unprotected anal intercourse (Elford et al, 2001; CDC, 2003).

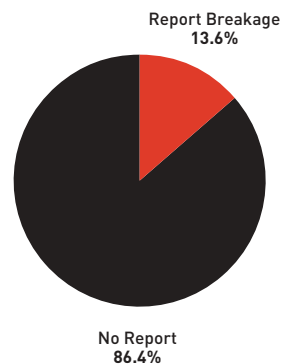
TABLE 35**WHERE MEN LOOK FOR SEX***

	REGULAR OR CASUAL%	CASUAL %
Malls	44.5	33.3
Telephone Chat	44.7	33.0
Public Washroom	48.6	31.6
Gay dance or party	43.8	30.4
Park Cruising Area	43.7	28.8
House party	43.5	29.9
Internet	43.5	29.5
Bathhouse	42.6	28.3
Bookshop / Video store	42.3	29.5
Straight Bar	42.2	29.1
Personal Ads	41.6	28.4
Gay Bar	40.6	27.0
Introduction from Friends	39.7	28.3

* PERCENT REPORTING AT LEAST ONE EPISODE OF UNPROTECTED SEX (PAST 3 MONTHS)

CONDOM EXPERIENCE AND USE

We asked men who reported anal intercourse and the use of condoms in the past 12 months about any experiences of condom failure, condom slippage and condom use practices. The figures show that 13.6% reported at least one episode of a condom breaking and 13.9% reported at least one episode of a condom slipping off. About 5% of men had experienced each of these more than once.

FIGURE 18**PERCENT OF MEN REPORTING CONDOM BREAKAGE IN PAST 12 MONTHS**

Recent evidence suggests that delaying the application of condoms may contribute to HIV infections (Calzavara et al, 2003). As shown in Figure 20, among men reporting either a regular or a casual partner, 52.2% reported delaying the use of condoms. Men who reported at least one episode of delayed application of condoms were more likely to report episodes of not using condoms (72.2%), compared to men who have not reported the delayed application of condoms (22.1%).

FIGURE 19
PERCENT OF MEN REPORTING CONDOM SLIPPAGE IN PAST 12 MONTHS

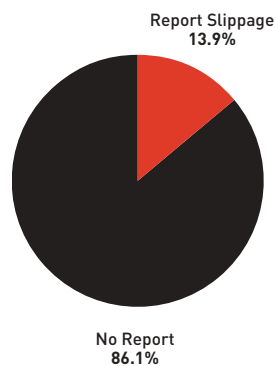


FIGURE 20
DELAYED APPLICATION OF CONDOM AT LEAST ONCE IN PAST 12 MONTHS

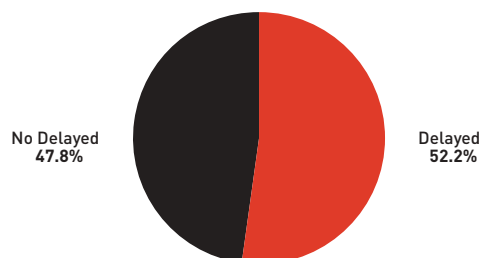
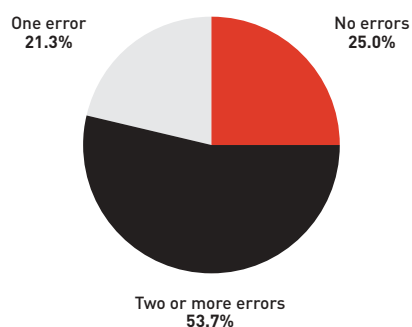


TABLE 36
CONDOM USE SKILLS, LAST 12 MONTHS

	TORONTO %	OTTAWA %	S. ONTARIO %	N. ONTARIO %	ONTARIO %
Unrolled condom before	7.8	4.8	5.6	4.3	6.5
Did not use any lubricant	12.5	11.9	11.2	11.4	11.9
Used saliva as a lubricant	16.9	14.8	15.0	13.8	15.8
Lots of lubricant in condom	10.1	10.2	7.0	9.8	9.1
No lubricant on outside of condom	7.5	4.8	5.8	3.5	6.4
Used a condom that was too short	6.1	3.4	4.7	3.9	5.2
Used a condom that was too long	3.3	1.7	2.1	2.0	2.6
Used a condom that was too tight	10.5	11.9	9.4	9.4	10.2
Used a condom that was too loose	3.3	3.1	1.8	2.0	2.7
Anal sex over 30 min—same condom	12.4	11.9	12.4	14.2	12.5
Other	0.8	0.8	0.9	2.6	0.9
None of the above	32.9	31.4	37.5	39.1	34.7

The study asked respondents about how they used condoms. Table 36 shows various condom use practices, some of which are considered poor or risky. Appendix 9 explains the proper use of condoms. Based on whether the practice is considered “safe” or “risky” by Canadian AIDS educators, a scale of errors was developed. At least 53.7% of men who said they used condoms reported two or more errors. (see Figure 21).

FIGURE 21
PERCENT REPORTING ERRORS IN CONDOM USE IN PAST 12 MONTHS



DISCUSSION

The findings of The Ontario Men's Survey provide an important and updated baseline on the social lives and sexual behaviours of gay and bisexual men in Ontario. This cross-sectional survey of HIV related issues is the single largest study of gay and bisexual men to be conducted to date in Canada. It deployed methods refined in this country by the investigative team, and it is the first multicentre study to include an HIV prevalence component, through the optional provision of a saliva specimen for subsequent laboratory testing. Use of the technique brings us closer to a true estimate of the actual prevalence than was previously available.

The study focussed on increasing the diversity and breadth of the sample within the identifiable gay and bisexual population of Ontario. It sought to include individuals with different community associations and with primarily gay and bisexual identifications. It was specifically intended to increase the numbers of respondents at the ends of the age spectrum, to increase the numbers of respondents from ethno-cultural communities who speak or use languages other than English or French, to recruit a geographically diverse sample and to recruit men whose unique gay subculture may not have been included in the samples collected in previous surveys.

The research team set out to achieve these goals by recruiting in a greater number of venues than previously undertaken, by including more non-commercial, gay-community groups and organizations and by recruiting a larger sample than in previous surveys.

The achievement of the target sample size in this study, while testimony to the effort of the recruitment team, reinforces the fact that there is increasing breadth and development in the gay, lesbian, bisexual and transgender community. Much of this has evolved and was achieved through the community-development and human-rights achievements of gay men, bisexuals and lesbians in Ontario. Also, it may result from the steady visibility of AIDS prevention and care initiatives.

As one looks at the findings of the study, one should keep in mind the type of sampling employed. The size of this convenience or purposive sample reflects an important and substantial cross-sectional view of the community. As previously described, random sampling within the gay and bisexual community, with its wide variations in subcultures, lifestyles and patterns of socialization, is not feasible or cost effective.

While data were collected in 13 regions of the province, the smaller sample sizes in some communities do not permit one to make statements with great confidence—as a small number of individuals in smaller communities may have a larger influence on the final percentages than in larger communities.

In achieving the sample size, recruiters sought diversity. Compared to the National Men's Survey, in the Ontario Men's Survey, there was a marginal decrease in the proportion of respondents recruited in Toronto through bars (about 78% compared to 74%), and a considerably lower percent (about 14% compared to 26%) was recruited through bathhouses. In the rest of Ontario, higher proportions were recruited through

community dances and groups (approximately 32% compared to 18%). These increases may be due to recruitment, or they may reflect changes within gay life since the earlier study. For example, at present, it may be easier to be a young gay man, and it may be easier to identify as a young gay man. To an extent this may be true across all ethnicities. It also may be easier within Canadian society to be an older gay man, to come out of the closet at an older age and to live a longer life due to advances in medicine, in health and in quality of life. The increases in numbers within subgroups would seem to reflect increases in the true proportion of these men in the larger population.

The success of the study was dependent on preparation of the community through an extensive promotional effort. Communities knew the study was coming. The study was given a strong and recognisable identity. Respondents had information about the study, trusted it and were ready to respond to the recruiters when approached.

Many of the efforts to recruit a diverse sample paid off. Almost four times as many men age 20 or younger were recruited in Toronto than in previous surveys. There was also an increase province-wide, of about seven percent. More than twice as many men of 50 and older were recruited in Toronto, and marginally more in the rest of the province. The study recruited greater proportions of men with lower levels of education (elementary or some secondary) in Toronto and elsewhere. These increases in diversity may reflect organic evolutions within the communities. However, increases in diversity are not reflected uniformly throughout the province. In terms of sexual orientation, there were few noticeable differences in the proportions recruited in this survey and in previous surveys. The stability in the proportion of those with different sexual orientations concurs with the findings of other researchers, who suggest that there are set rates of sexual orientations within populations (Kinsey et al, 1948; Bancroft, 1997).

Also, the study's recruitment process doubled the percent of men in Toronto whose first language was other than English or French. In other regions of the province, the percentage of men speaking a language other than English or French was about the same as in the National Men's Survey. A very small proportion of men completed the survey in a first language that was not English. The greatest number of men who used a translated questionnaire were Hispanic. Of particular note is the number of Two-Spirit individuals (First Nations or Aboriginal)—more than 150 were recruited in the study.

Little data are available on ethnicity and race in the gay and bisexual community in Canada. In the Toronto sample of the Ontario Men's Survey approximately 24% were from minority racial or ethno-cultural groups. Given that the 2001 Census indicates visible minorities comprise about 43% of the population of Toronto, the percent of men from these communities who participated in this study falls well below what might have been expected. This may reflect upon the recruitment process, the fact that men from visible minorities may not socialize to the same extent within the gay community as others, or they may identify differently than do other men who have same-sex relationships. This identifies an understudied area of research that needs to be explored.

For the respondents of this study, gay bars were still the major source of finding sexual

partners. This is not surprising, considering the recruitment strategy for the study. The second most prominent source for sexual partner recruitment was the internet, which provided a source for finding sexual partners for about one-third of respondents. While this is a relatively new phenomenon, it does not suggest a totally changed pattern of interaction within the community. Most men said they used more than one route to find sexual partners. Some studies have suggested that the internet leads men into encounters where higher-risk sexual activity is experienced (Centers for Disease Control and Prevention, 2003; Elford et al, 2001). Because the men in this study used many different venues, and because context-specific questions related to sexual risk were limited, it was difficult to verify this finding from the data available. As men's patterns of social interactions change, and as ways to recruit sexual partners change, we may need to modify the ways in which we provide services and educate men.

For the first time in Ontario, this study provided, in a broad community sample, some indication of the nature of sexual contact with casual and with regular partners. It is difficult to assess how partnering may have changed over time, because there are no previous data for comparison. Definitions of regular and casual partners provided a specific challenge in this study. We defined a regular partner as an individual with whom sex occurred on more than one occasion. Using this definition, almost equal proportions of participants in the Ontario Men's Survey reported having sex with casual and regular partners.

This study provided the first evidence in a community-based sample of an increase in the numbers of gay and bisexual men in Ontario reporting at least one episode of unprotected anal intercourse. The rate of men reporting at least one episode of unprotected anal intercourse in Toronto has doubled in the 10 years since the previous survey; the rate has slightly less than doubled in the rest of Ontario. While the behaviour helps explain the increase in HIV infections, all of the reasons for the increase could not be conclusively explored in the study.

The study provided some evidence that men may use particular strategies when they decide to have unsafe sex. For example, twice the proportion of men reported unprotected insertive intercourse and unprotected receptive intercourse with regular partners than with casual partners. Researchers have described several decision processes that may be used: negotiated safety within a primary relationship, and strategic positioning—choice of sexual role and assumed or known HIV status of partner, among others (Van de Ven et al, 2002; Crawford et al, 2001). Also, there are differences in the rates of unprotected sex based on knowledge and assumptions about a partner's HIV status.

While there is evidence of increased unprotected intercourse, there was some evidence that the pattern within subgroups may be changing. For example, the youngest age group in this study reported a slightly lower percent of unprotected anal intercourse than other groups. Nevertheless, the extent to which even the youngest group reported unprotected anal intercourse is well above the level of unprotected sex that their comparable age cohort reported 10 years earlier.

The study provides some insight into the practices and use of condoms. Rates of condom breakage, slippage and delayed application and descriptions of condom use suggest possible points of intervention for educational programs.

The study also showed current sexually transmitted infections and other diseases (within the past 12 months) to be prominent. Other health behaviours examined in this survey, while not directly related to HIV transmission, reveal some evidence of health risk behaviour in this population (Myers, et al, 2004). Of our respondents, 35% reported no recreational substance use. The most commonly used recreational substances were marijuana, cocaine, special K, poppers and ecstasy. Popper use in Toronto is about the same as it was 10 years ago. There were no comparable data for the other regions. Heroin and solvents were used by less than one percent. Approximately 46% used marijuana. A proportion of men in the gay community, some of whom may be receiving treatment for HIV, may view marijuana as a medical substance and feel it contributes to their health.

Compared to previous data, a greater proportion of men in the Ontario Men's Survey had been tested for HIV (Myers et al 1996; Godin et al, 1997). In Toronto, in 2002, close to 80% had been tested, compared to about 65% in the National Men's Survey. In the rest of Ontario, between 73% and 82% of respondents had been tested, compared to about 61% in the National Men's Survey. Certainly at the community level this provides some evidence that prevention and education initiatives aimed at increasing rates of HIV testing have had an impact, and would suggest that efforts towards this end be continued. Establishing HIV prevalence on the basis of saliva testing is considered more accurate and up-to-date than self-reports. Therefore, this study provides the most accurate recording of HIV prevalence in the gay and bisexual community to date. In concordance with provincial HIV testing data, the highest HIV prevalence rates were found in Toronto. Some differences in prevalence rates were found with age, education and sexual orientation.

Comparisons of the self-report and the positive test result reveal some critical and important discrepant findings. For 16% of laboratory HIV-positive test results, individuals self-reported their status to be HIV negative. For another 11% of laboratory HIV positive test results, men did not report their result, indicated they did not know the result of the test or said they had never had an HIV test. This suggests that up to 27% of respondents did not know their HIV antibody status or chose not to disclose it in this study.

While this report provides evidence that has been neglected for more than 10 years, it is important to recognize that not all potential questions can be answered in a single report or by a single survey. This report is an initial look at these data. With the wealth of collected data, more complex analyses are warranted. We hope these data will be used to promote discussion and to permit different groups in different communities to reflect on their own diversity and challenges. The report provides data that will help communities, educators, public health promoters and policy makers target and enhance their existing initiatives.

This report has been primarily descriptive. It has focussed on regional differences and several of the key dependent variables. There are important analyses to be undertaken, which could look at differences between men of different age groups, between men with different sexual preferences, partner types and cruising venues, and different levels of community affiliation. Further, there are aspects of the lives of gay and bisexual men that we know little about, for example, the extent to which individuals move between communities in pursuit of support, health services and HIV testing. The ethnicity and racial data that have been examined require much closer examination. Certainly, there is much research that needs to be undertaken to look at the experiences of minority racial groups in the gay community, in order to further understandings of how race and experiences of individuals with different racial backgrounds within the gay community impact on general and sexual health.

While much may be gleaned from the questions asked in this study, the data are likely to provoke many more questions than can be asked in a single study. Answers to some of the questions may be provided through research. However, formulating new questions and finding solutions will require dialogue within the community and collaboration between researchers, communities and funders. No single study or approach can possibly answer all of the questions. Some questions may be answered through focused qualitative research and others through quantitative surveys such as this. Researchers and communities working together can continue to learn new ways of understanding the lives of gay and bisexual men, the issues that HIV and AIDS present, and ways in which prevention and care can be effectively developed and provided. This study provides a renewed baseline of information that has been missing for a number of years. The findings confirm that the potential for increasing rates of infection continue. They suggest that some groups may be more vulnerable than others, but also that risk may exist across the many subcultures within the community. This study has confirmed that a proportion of gay and bisexual men are infected with HIV and may not know it or may choose not to or be unable to recognize or report it.

There is evidence that men may use and act upon particular strategies before deciding to have unprotected sex in an effort to protect themselves and their partners, yet some of the assumptions behind these strategies may in fact contribute to new infections. Prevention messages concerning HIV transmission need to continue to clarify realities and identify faulty assumptions.

To understand the factors that may be contributing to increased rates of new infections, it is important to look at social and structural issues involved. There are basic human-rights issues and social determinants of health that require examination in relation to HIV within the gay community. Finally, it is known that condoms may not be the perfect solution: from time to time they fail. Greater attention should be given to technologies that might improve and enhance the use and safety of condoms.

The Ontario Men's Survey has provided an understanding of variations in behaviours and HIV prevalence between regions of the province, as well as factors associated with

these variations in a community sample of gay and bisexual men. The study provides some understanding of current issues associated with HIV infection and related behaviour and of factors and issues that may contribute to increases in HIV infections. What this study has not done is provide a definitive set of recommendations.

However, there are several principles that could be considered in the development of programs:

- Interventions should not simply consider risk behaviour but also the personal, social and structural determinants of risk.
- The important elements of diversity and subcultures that contribute to marginalization of individuals, whether HIV status, race, social position or sexual practices and lifestyle, should be considered.
- Interventions should be accessible and recognise regional differences in relationships, issues and concerns of gay and bisexual men.
- Action should acknowledge and respond to men of different ages, incomes, education and language groupings within the gay community.

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APPENDICES

APPENDIX 1

Roles and functions of the Provincial Community Advisory Committee:

- To advise study investigators and staff on province-wide community needs.
- To assist study investigators, staff and local co-ordinators in making local community and agency contacts.
- To provide practical advice to study investigators and staff and to be involved in the recruitment and conduct of the survey.
- To provide advice regarding the promotion of the Ontario Men's Survey.
- To advise on the hiring and the supervision of the local co-ordinators.
- To assist local co-ordinators in the recruitment and training of volunteers for the study.
- To identify and advise on emerging issues and processes as they appear locally.
- To advise on the questionnaire and its development.
- To provide input into the research process.
- To participate in the interpretation of research findings.
- To advise and to be involved in the dissemination of research findings.

APPENDIX 2

Roles and functions of the Toronto Co-ordinating Committee:

- To advise study investigators on Toronto-specific community needs.
- To assist Toronto local co-ordinators in recruiting volunteers.
- To assist Toronto local co-ordinators in making local community and agency contacts.
- To provide practical advice on recruiting study participants and on conducting the Ontario Men's Survey in Toronto.
- To provide practical advice on recruiting study participants and conducting the Ontario Men's Survey in specific ethno-cultural communities.
- To provide advice regarding the translation of the Ontario Men's Survey into targeted languages.
- To participate in the interpretation of research findings.
- To advise on and to be involved in the dissemination of research findings.
- To identify and advise on emerging issues as they appear locally.
- To help resolve problems as they arise.

APPENDIX 3

Frequently Asked Questions

The following are questions about the Ontario Men's Survey that might be posed to volunteers and local co-ordinators by potential respondents. Suggested answers are given for each.

This list contains questions that will likely come up in venues, as well as issues that were raised during volunteer training in various communities. As the study progresses and more feedback is received from volunteers and local co-ordinators, this section may be expanded.

QUESTIONS ABOUT PARTICIPATING IN THE Ontario Men's Survey

Why should I participate?

Your participation in this survey will lead to valuable research data that can be used to help your community. People are becoming infected with HIV and we're trying to understand why. We're looking for ways to help and to educate people, but we need to know where to focus. This survey helps us figure it out.

What do you ask about?

The questionnaire deals with a variety of topics, including HIV antibody testing, community involvement, sexual activity, the challenges of using condoms, experiences of racism, AIDS education and more.

Isn't there already enough information about this?

There is information about how HIV is spread, but there are no concrete data for why it is spread. The data that we have are over 10 years old; much has changed since that time, including developments in the gay community, increased human rights, the growth of community activities and venues, a larger number of men living with HIV/AIDS, more AIDS Service Organisations and new treatments.

Who is going to see the results of the survey?

The results will be used by many individuals and groups: AIDS Service Organisations providing education and support; individuals in the community at large; health policy makers who need to develop effective programs; and researchers in Canada and internationally who are attempting to understand the epidemic.

How long will this take?

On average the survey takes about 10 to 15 minutes to complete. Some people will take more or less time, depending on how many of the sections apply to them.

QUESTIONS ABOUT APPLICABILITY

I don't think of myself as gay or bisexual. Should I participate?

If you're a man who has sex with men, and are in this venue, we would like you to participate in the survey.

I already know my HIV status. Should I participate?

The survey isn't designed to inform people of their status. A lot can be learned about HIV transmission from both HIV-negative and HIV-positive men. The questionnaire looks at varied subjects that can be applied to all men and that don't depend on your HIV status.

Currently I am not sexually active. Should I participate?

There are questions for men who are not sexually active. The survey explores many aspects of male sexuality including those who do not have sex. As well, we're looking at different ways people can contract HIV, which is not solely transmitted through sex.

I am (was) a man who has (had) sex with men, but I consider myself to be a woman. Should I participate?

If you don't currently self-identify as a man, many questions won't apply to you. We do appreciate your interest in the survey and willingness to participate.

QUESTIONS ABOUT TESTING

I already know my HIV status and can tell you in the questionnaire. Why should I provide a saliva sample?

Many people are aware of their HIV status, but some are not. To get the most accurate data possible, we need to include as many saliva samples as possible. If your concern is privacy, we remind you that the saliva test is anonymous and cannot be traced back to you.

I'll do the questionnaire, but I won't provide a saliva sample. Is that okay?

Providing a saliva sample is not required, but highly encouraged. The information we get is more meaningful if we receive a sample with the questionnaire, and will be that much more helpful to the community. Most respondents do provide a sample, and if your concern is privacy, we remind you that the saliva test is anonymous and cannot be traced back to you. If you have very strong reservations about the sample, you may participate only in the questionnaire.

Can either the questionnaire or the saliva test be traced back to me?

No. The questionnaire does not ask you to identify yourself in any way. There are no identifying marks on the saliva collector or on the envelope you use to deposit your questionnaire. If any item is received with identifying information, we'd discard it to maintain the anonymity of the study.

I thought I couldn't get HIV from kissing. Why use a saliva sample?

There are no recorded cases of infection through saliva because the concentration of the virus in saliva is very low. Huge quantities of saliva (about five litres) would have to be consumed for there to be a possibility of infection. The laboratory actually tests for the HIV antibody, which is produced by the body in response to HIV.

Can I get the results of my HIV test?

No. In order to maintain the anonymity of the survey, we don't ask for any identifying information that links you with your sample. Therefore we're unable to provide you with any results. If you're interested in getting further HIV/AIDS information, I can provide you with the toll-free telephone number for the provincial AIDS hotline. They are there for counselling purposes and can help you with testing options. [Provide the card with the provincial AIDS hotline number.]

QUESTIONS ABOUT COMPLETING THE QUESTIONNAIRE

I don't understand this question. Can you help me?

I can help you with the basic instructions on completing the questionnaire, but I can't help you with the meaning or wording of specific terms or questions. Do the best you can at answering and interpreting the items. Remember, this isn't a test or an examination, so don't worry if one or two terms aren't completely clear to you.

I don't have enough time to do this today. Can I fill it out at another time?

On average the survey takes only about 10 to 15 minutes to complete, but it's better to do this when you aren't rushed. If you can't spare the time today, see my co-ordinator about upcoming opportunities to participate. [Direct the individual to the local co-ordinator.]

I've started the questionnaire, but I don't have enough time to finish it. Can I take it home?

No. We're only allowed to have people fill them out here, in the venue. If you've completed most of it, we will use it as is. If you've just started it, we'll discard your questionnaire and you can participate at a later date. On average the survey takes only about 10 to 15 minutes to complete, and you have already completed part of it. The best option would be to hold on for just a few more minutes and complete it today.

I've got some friends who will want to do this. Can I take some questionnaires for them?

No. We're only allowed to have people fill them out here, in the venue. See my co-ordinator about upcoming opportunities for your friends to participate. In the meantime give them a brochure that describes the study and might get them interested in participating. [Direct the individual to the local co-ordinator and provide some Ontario Men's Survey brochures.]

QUESTIONS ABOUT THE DESIGN OF THE ONTARIO MEN'S SURVEY

Women get HIV too. Why aren't we allowed to participate?

This survey is designed for gay and bisexual men. It's true that there have not been enough HIV/AIDS studies for women, and researchers and funding organisations need to consider how important it is to study all parts of the population. Focussing on men for this study allows us to ask very specific questions about men's sexual behaviour with men. Women definitely do get HIV as well, but this particular study is about men.

Why isn't there a survey for us (women, ethno-cultural group, language group, heterosexuals, etc.)
Isn't this another way of researchers ignoring or excluding us?

or

This particular question offended me. Why was it included?

or

There is a very important subject related to HIV infection that was completely ignored by the survey.
Why wasn't it included?

During my volunteer training, I had a chance to look at the questionnaire and it raised some similar concerns for myself. I know how you might feel. However, I'm only a volunteer and I was not involved in the development of the study. Please take a brochure, which explains some of the community consultations that took place early in the process. It also contains the contact information for the research team at the University of Toronto, so you can contact them directly to discuss your concerns. [Provide the Ontario Men's Survey brochure.]

APPENDIX 4

Promotional Materials Used in The Ontario Men's Survey

The Brochure

The Ontario Men's Survey brochure was a two-colour, three-leaf, 8.5" by 8.5" information sheet. The English text of the brochure, later translated into the six other languages, was a multi-purpose document intended to inform people, create interest, address concerns, credit participating agencies and stimulate participation. The text of the brochure contained sections on the study, the research partners, a review of past research, an explanation for the saliva sample, and HIV information telephone lines and resources.

The brochure also appeared as an insert in the Toronto and Ottawa editions of *Xtra!*, a popular biweekly gay and lesbian magazine.

Posters

Ontario Men's Survey posters were placed in visible locations in venues that granted permission to display them. They were 16.5" by 8.5" in size, designed to be posted vertically, and included 3" of white space at the bottom. Some communities used this white space to write notices of the next data collection day and time.

Postcards, Stand-up Cards, Coasters

Cards with basic information about the Ontario Men's Survey were suitable for distribution in venues, for bulletin boards and in clinic waiting rooms where the larger Ontario Men's Survey brochure was not suitable. Postcards were also used as handouts for street outreach.

Printed, double-sided coasters were highly visible and distributed in bars and alcohol licensed venues where drinks were served.

APPENDIX 5

Questionnaire Topic Areas

The self-completed questionnaire used for the Ontario Men's Survey, modelled on previous surveys, was composed of 88 questions in nine topic areas, as shown in the table:

QUESTIONNAIRE TOPIC AREAS

SECTION	TITLE— (YOU REFERS TO THE RESPONDENT)
1	About you
2	About where you socialize
3	About your sexual health
4	About your sex life
5	About you, condoms, and sex
6	About you and substance use
7	About you and HIV testing
8	About your thoughts on HIV/AIDS education and the Condom Country campaign
9	About your involvement with other studies

APPENDIX 6

Welcome to Condom Country Campaign

The Welcome to Condom Country campaign was produced by the AIDS Committee of Toronto (ACT) and launched in June 2001 in response to rising HIV infection rates in Toronto among gay and bisexual men and among other men who have sex with men. The campaign consisted of ads in the gay and alternative media, transit advertising in Toronto's subways, buses and streetcars, transit shelter ads, and posters, brochures, condom packages and other peripheral materials distributed in gay community venues.

Copies of the report on the campaign are available at the AIDS Committee of Toronto Library, or from the ACT website: <http://www.acttoronto.org/research>

APPENDIX 7

NUMBER AND TYPE OF VENUES WHERE RECRUITMENT OCCURRED BY REGION

CITY OR REGION	BARS	BATHHOUSES	COMMUNITY GROUPS	TOTAL
Hamilton	7	0	8	15
Kingston	2	0	17	19
Kitchener	2	0	4	6
London	2	1	4	7
Mississauga	1	0	5	6
Oshawa	1	0	6	7
Ottawa	7	2	24	33
Peterborough	0	0	7	7
Niagara	2	1	5	8
Sudbury	2	0	5	7
Thunder Bay	1	0	9	10
Toronto	21	6	12	39
Windsor	2	0	3	5

APPENDIX 8

Select Ontario Men's Survey Papers Presented at Conferences

Allman, D., Myers, T., Calzavara, L., Ennis, M., Remis, R., Maxwell, J. and Travers, R. (2004). Do Men who Receive Money vs Goods or Drugs for Sex Differ? *XVth International AIDS Conference*, Bangkok, July 11–16.

Allman, D., Myers, T., Calzavara, L., Remis, R., Major, C., Travers, R. and Maxwell, J. (2002). Ontario Men's Survey—Community in Action: Processes for Re-establishing Baseline Sociobehaviour and HIV Prevalence Measures in an Ever-diversifying Community. *XIV International AIDS Conference*, Barcelona, Spain; July 7–12.

Allman, D., Myers, T., Calzavara, L., Remis, R., Travers, R. and Maxwell, J. (2003). Penile Modification and Dimensions Influence Men's Vulnerability to Condom Breakage and Slippage. *AIDS Impact 2003—6th International Conference: Biopsychosocial Aspects of HIV Infection*, Milan, Italy, July 7–10.

Allman, D., Myers, T., Calzavara, L., Remis, R., Travers, R. and Maxwell, J. (2003). Race and Gay Culture: Exploring Men's Perceptions of Same Sex Interactions. *AIDS Impact 2003—6th International Conference: Biopsychosocial Aspects of HIV Infection*. Milan, Italy, July 7–10.

Myers, T. (2003). Gay Men's HIV Prevention in Ontario—Ontario Men's Survey: Issue Based Forum. *Ontario HIV Treatment Network Research Conference 2003*, Toronto, Canada; November 3–4.

Myers, T., Allman, D., Remis, R., Calzavara, L., Ennis, M., Maxwell, J., Swantee, C. and Travers, R. (2004). Discordant HIV Test Results among a Community Sample of Gay and Bisexual Men: Results from the Ontario Men's Survey. *XVth International AIDS Conference*, Bangkok, July 11–16.

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APPENDIX 9

Good “Condom Use” Practices

The correct use of a latex condom and water-based lubricant can greatly reduce your risk for getting or transmitting HIV. Condoms can tear or slip if used incorrectly.

It is important to check the date printed on the outside of the condom package to ensure the condom hasn't expired. Carefully open the package, making sure not to tear the condom.

You can place a drop of water-based lubricant in the reservoir (tip) of the condom. Roll the condom all the way down the length of your erect penis. Make sure to use lots of water-based lubricant on the outside of the condom.

Check the condom periodically during anal sex to ensure that there is sufficient lubricant present and to make sure the condom hasn't slipped or torn. Replace the condom with a new one if you are engaging in anal sex for a long period of time (more than 30 minutes).

There are a variety of sizes and types of condoms on the market. Try several until you find one that is comfortable and works for you.

APPENDIX 10

Glossary of Terms

Comparison of the phrases used in the survey and the technical terms used in the report to describe sexual activities

Phrases Used in Survey	Technical Terms Used in Report
Deep kissing/tongue kissing	Deep tongue kissing
Jerking off together	Mutual masturbation
Rimming, tongue to anus	Oral-anal sex, Anilingus
Sucking, with a condom	Oral, with condom (R), Fellatio, with condom (R)
Sucking, without a condom	Oral, no condom (R), Fellatio, no condom (R)
Getting sucked, with a condom	Oral, with condom (I), Fellatio with condom (I)
Getting sucked, without a condom	Oral, no condom (I), fellatio (no condom (I)
Fucking, with a condom	Anal, with condom (R)
Fucking, without a condom	Anal, without condom (R)
Getting fucked, with a condom	Anal with condom (I)
Getting fucked, without a condom	Anal, without condom (I)

R = receptive

I = insertive



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