



Know more.

Snapshots from the *Lambda Survey*
of gay and bisexual men.

mtrack





Thank you

Lambda was funded by the Public Health Agency of Canada, and the AIDS Bureau, Ontario Ministry of Health and Long-Term Care.

This survey would not have been possible without the commitment and co-operation of men who participated in the Lambda Study, volunteers and staff of the AIDS Service Organizations and Public Health Departments who promoted the study and assisted with data collection, and staff of the Public Health Agency of Canada.

We also want to thank, for their time and effort, the Advisory Committee, whose advice was invaluable.

Lambda was the Ontario component of the M-Track study.

A full technical report of the detailed Lambda findings has also been published. It is available www.lambdasurvey.ca.

What is the Lambda study?

Lambda was a survey of 2,438 gay and bisexual men in Toronto and Ottawa. The purpose of the study was to collect information from men in these cities about their sexual and other behaviours, including condom use and HIV status. This community report presents some of the key study findings.

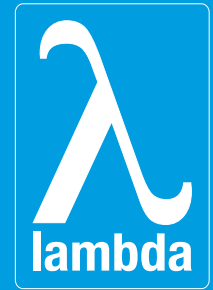
Gay/bi men are still the most heavily affected group in Ontario.

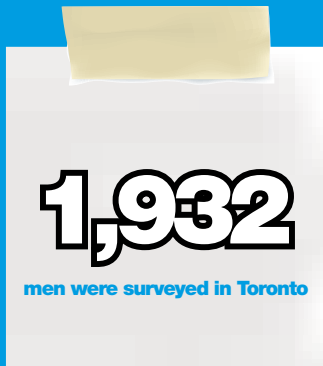
In Ontario, as in much of the rest of Canada, gay and bisexual men are still the group most heavily affected by HIV. In 1985, 90% of the people diagnosed with HIV in Ontario were gay/bi men. Since that time, rising infection rates in other groups, including women and Aboriginal peoples, have altered the demographics of HIV – yet gay/bi men still make up the majority of Ontario's new infections. In 2008, of an estimated 29,787 persons living with HIV in Ontario, 61% were gay or bisexual men.

Does this study represent all gay/bi men in Ontario?

Not completely. The *Lambda* study was limited to the cities of Ottawa and Toronto. It was intended to study gay, bisexual, two-spirit, and other men who have sex with men (no matter how they describe their own sexual identity) in those two cities. (See demographics table on page 5.) For simplicity, we will describe everyone who took part in *Lambda* as “gay/bi men.”

Since participants were enrolled through targeted gay venues, men with fewer ties to the gay community were less likely to be included. However, efforts were made to include as diverse a group of men as possible – for instance, by seeking out men from a range of different ethno-racial groups. Therefore, this study may not be representative of the province as a whole, and it may not represent the full diversity of these men even within Toronto and Ottawa. However, it should accurately portray some characteristics of many gay and bisexual men in Toronto and Ottawa.





Who did we study?

All *Lambda* study participants were at least 16 years of age. All had had sex with other men, although they did not have to describe themselves as gay or bisexual. The majority were born biologically male; some were not but identified themselves as male (see “Trans men,” below).

Enrolment took place during the spring and summer of 2007, at gay venues, including:

- gay bars, dance clubs, restaurants and other business establishments,
- health care clinics,
- bathhouses, parks and other cruising areas, and
- gay community groups, social organizations, and special events.

Participants were asked to complete an anonymous questionnaire and to provide an anonymous blood sample (via fingerprick) which was tested for HIV, hepatitis C virus (HCV) and syphilis. Participants could decline to either answer the questionnaire or to provide the blood sample.

Trans men

The *Lambda* study was open to trans men – people who were born or assigned female at birth and who now identify as men. Twenty-two trans men took part in the survey; the information they provided was looked at separately.

The majority of trans men identified as gay and about one third identified as bisexual. Like other gay/bi men, the trans men we surveyed looked for sex in places including gay bars, clubs and parties, bathhouses and other public sex environments. Also, like other gay guys, some had sex that put them at risk of HIV and other sexually transmitted infections. About one quarter indicated they had been fucked without a condom by a guy they didn’t know, whose HIV status they didn’t know, or who they knew to be HIV positive. This suggests that we need to keep working with gay, bi trans men to better understand their sexual health needs and support them in having good, safe sex with other men.

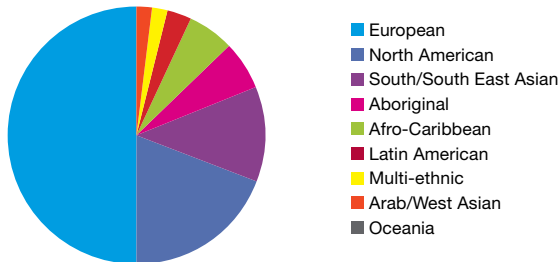
The full report on the trans men who took part in *Lambda* is included in the technical report, available at www.lambdasurvey.ca.

Demographics

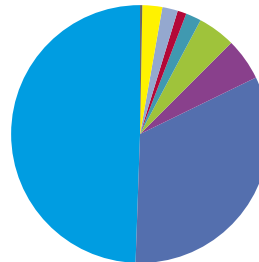
Of the men taking part in the Lambda study...	
1,932	were surveyed in Toronto
506	were surveyed in Ottawa
2,438	men participated in total
1,104	(45.3%) provided a blood sample
86.7%	identified as gay or homosexual
10.0%	identified as bisexual
1.9%	identified as straight or heterosexual
1.4%	identified as two-spirit (a First Nations term for gay or bisexual)
39.8 years	was the average age
\$45,000	was the average income
over 60%	had post-secondary education



Participants' Ethnicity – Toronto



Participants' Ethnicity – Ottawa



First language of participants – Toronto

74%	English
9%	French
14%	A language other than English or French
1%	English and French
2%	English and a second language other than French
0%	French and a second language other than English
0%	English and French and a third language

First language of participants – Ottawa

63%	English
27%	French
8%	A language other than English or French
1%	English and French
1%	English and a second language other than French
0%	French and a second language other than English
0%	English and French and a third language

How many men had HIV?

As part of the Lambda study, participants contributed blood samples which were anonymously tested for HIV. According to these blood tests, 11.3% of the men in Ottawa and 23.8% of those in Toronto were HIV-positive.

Other studies have found similar differences between Toronto and Ottawa, and have also found that HIV rates among gay/bi men in Toronto are among the highest in the country. However, we do not know why there is such a large difference, or why the rate in Toronto appears to be so high.

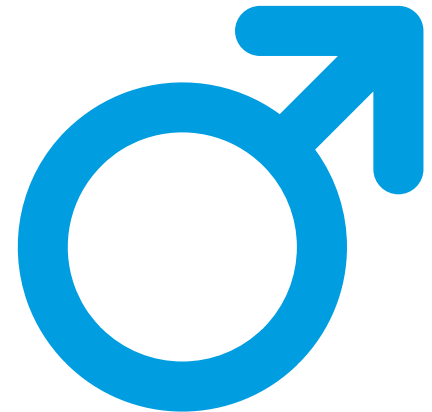
The highest rates of HIV were found in men in their 40s, in those with secondary (high school) education or less (33.5%), and in those with annual incomes under \$20,000. In Toronto, HIV rates varied between men of different ethnicity – a difference that was not seen in Ottawa.

How many men knew their HIV status?

Lambda men were also asked what they believed their own HIV status to be. We compared their answers to the HIV antibody test results from their anonymous blood samples.

Out of the men who were confirmed as HIV-positive by blood test:

- 73% knew they were HIV-positive
- 16% believed they were HIV-negative
- 11% said they did not know their HIV status.

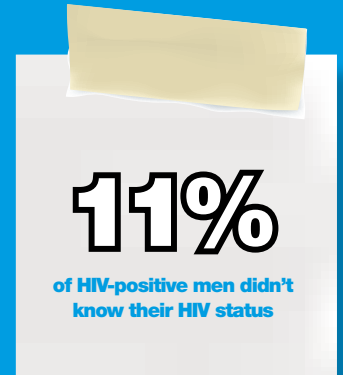


73%

of HIV-positive men knew
their correct HIV status

16%

of HIV-positive men believed
they were HIV-negative



New infections are continuing

As well as finding significant numbers of HIV-positive gay/bi men with HIV in Toronto and Ottawa, the Lambda study found that many more are still becoming newly infected. In Toronto, the rate of new infections was estimated at 5.1% per year: in other words, out of every 100 HIV-negative gay/bi men in Toronto, 5.1 are likely to become infected with HIV over a one-year period. In Ottawa, the new infection rate was 3.5% per year. These rates of new infections (incidence) can be challenging to estimate, and are probably too high. It is clear, however, that the rate at which HIV is spreading among gay men in Toronto and Ottawa remains a concern.



Sex – safer and otherwise

Most men get HIV through unprotected anal sex (fucking without a condom) with men who are HIV-positive, who may or may not know their HIV status. While most of the men in the Lambda study used condoms for anal sex most of the time, some still reported having unprotected anal sex.

More often than not, participants had used condoms the last time they had anal sex (63.7% in Toronto, 57.5% in Ottawa). Over a longer period, though, unprotected anal sex was more common. Sixty percent of the respondents in Ottawa and 56.5% of those in Toronto had had unprotected anal sex (as either a top or a bottom) at least once in the past six months. We do not know how many times these men had unprotected sex during that period – it may have been many times or only once.

“Partially protected” sex

“Delayed condom use” refers to anal sex that starts off unprotected, with a condom being put on partway through and used for the remainder of the act (usually until ejaculation — “cumming”). At least one study has found that delayed condom use poses a significant risk of HIV infection. Just over half (51.6%) of Lambda participants delayed condom use during insertive anal sex (topping) on at least one occasion, and 47% did so during receptive anal sex (bottoming). Also, about 15% reported that on at least one occasion they had begun anal sex using a condom but had removed it before cumming.

Casual partners

Use of condoms with casual (i.e., one-time) partners varied widely. Nearly half of the participants reported using condoms every time they had anal sex with one-time partners: 46.5% for insertive sex (topping) and 49.0% for receptive (bottoming). Many more used condoms “most of the time” or “almost every time”: 24.8% (top) and 20.6% (bottom). Another 18.5% (top) and 19.8% (bottom) used them “sometimes” or “rarely.” Just over 10% said that they had never used condoms with one-time partners in the past six months.

Overall, more than 30% of the men who had one-time partners in the past six months had had unprotected anal sex with them. Nearly one in five HIV-negative men (19.1%) did not use a condom for anal sex with one-time partners whose HIV status they did not know.

“...serosorting does not guarantee safety, since many men are not aware of their true HIV status.”

What this study does and does not tell us

Men in the Lambda study were asked about their condom use in the past six months, including how frequently they used condoms with one-time and ongoing partners. However, we do not know exactly what influenced their choices to use or to not use condoms. Also, for men who reported having unprotected sex at least once in the past six months, we do not know whether this meant just once or more than once.

For instance, some men may be choosing to “serosort” – i.e., to have unprotected sex with men they believe are the same serostatus (HIV-positive with HIV-positive, HIV-negative with HIV-negative). However, serosorting does not guarantee safety, since many men are not aware of their true HIV status: see page 6.





Cigarettes, alcohol & recreational drugs

Cigarette smoking was common

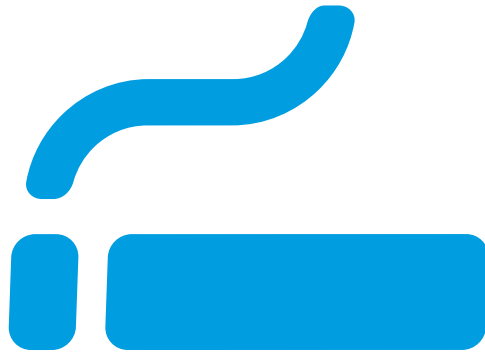
Over one-third of the men in our study smoked cigarettes, and 25.7% smoked every day. There was no significant difference between the men in Ottawa and Toronto.

Alcohol was the substance most commonly used prior to sex

Men were asked about recreational drug and alcohol use before sex—specifically, in the two hours prior to sex with a male partner. Alcohol was the most common: 72% reported drinking before sexual encounters, with 31.6% drinking before at least half their sexual encounters. Marijuana, poppers and erectile drugs (Viagra, Levitra and Cialis) were the next most common.

Table *In the past six months, how many men used alcohol or drugs before sex?* shows how many men had used recreational drugs and alcohol before sex in the past six months. There was a wide variation in how frequently men used drugs and alcohol. This table shows how many men had used each substance even once in the past six months; considerably more men were occasional users than frequent users for most drugs.

Individual drug usage was not significantly different between Toronto and Ottawa, except for the following, all of which were more frequently used in Toronto: poppers (34.8% in Toronto, 14.8% in Ottawa), cocaine (15.6% in Toronto, 10.3% in Ottawa), and crystal meth (7.1% in Toronto, 3.3% in Ottawa).



In the past six months, how many men used alcohol or drugs before sex?	
Alcohol	72%
Marijuana/hash/pot	35%
Poppers	33%
Erectile drugs (Viagra, Levitra, Cialis or others)	19%
Cocaine/crack	14%
Ecstasy/MDMA	14%
Ketamine/ K	8%
Crystal meth	6%
GHB	5%
Other drugs*	2%
<i>*(Including amphetamines and stimulants other than crystal meth, tranquilizers, benzodiazepines, psychedelics, heroin & other opioids.)</i>	



Substance use: Injection drugs

One out of ten had injected drugs or steroids at some point

Just over 10% of participants reported having injected steroids or recreational drugs at least once in their lives. Cocaine and steroids were the most frequently injected drugs, followed by heroin, crystal methamphetamine and other drugs. Considerably fewer people had used any injection drugs recently. In the past six months, 3.9% of respondents in Ottawa and 2.5% in Toronto had injected either steroids or recreational drugs.

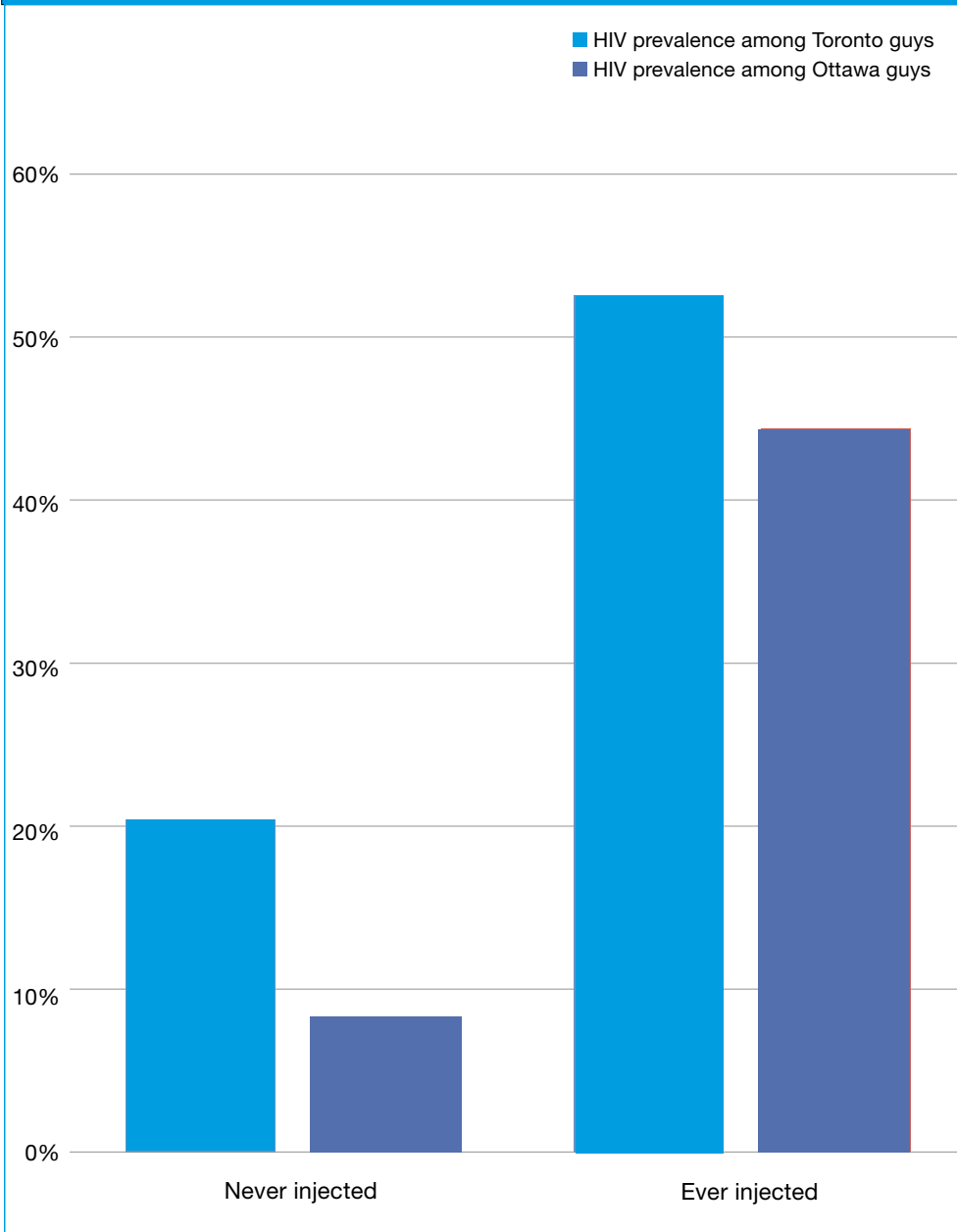
Any history of injecting tripled the risk of HIV infection

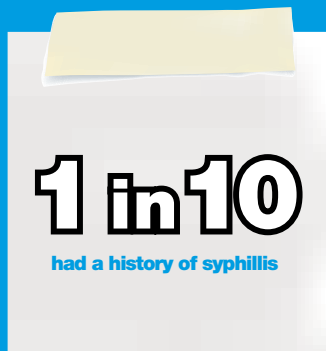
HIV infection rates were roughly three times higher among people who had any history of injecting. This was true in both Ottawa and Toronto, regardless of whether drugs or steroids were injected, which specific drugs were used, and whether or not they had been injected in the past six months.

Among respondents who had injected drugs or steroids, HIV infection rates exceeded 44%.

HIV infection rates were roughly three times higher among people who had any history of injecting.

HIV prevalence among guys by injection drug use history (excluding steroids)





Hepatitis C, syphilis and other STIs

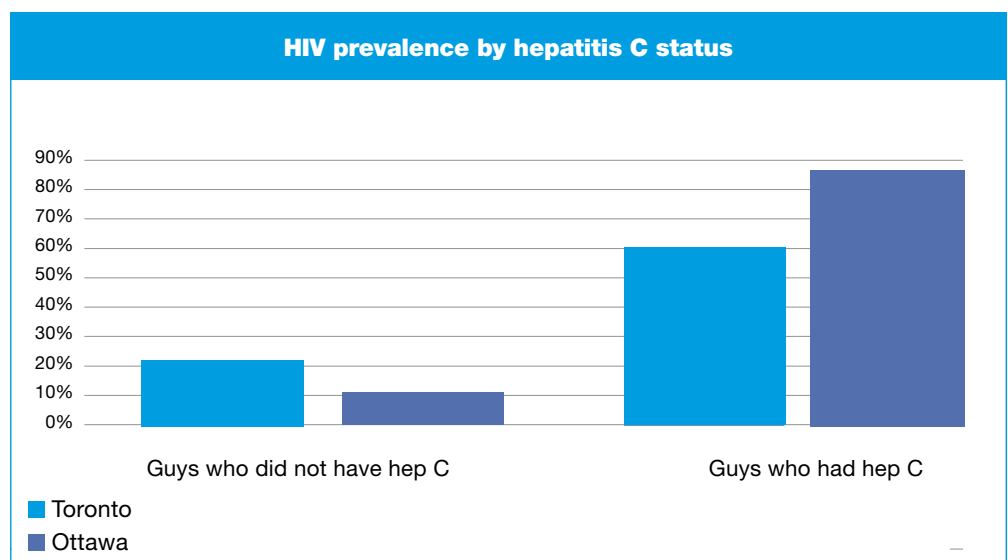
Fewer than 5% of participants had hepatitis C

A small but significant number of participants – 4.9% in Toronto and 2.3% in Ottawa – tested positive for HCV, the virus that causes hepatitis C.

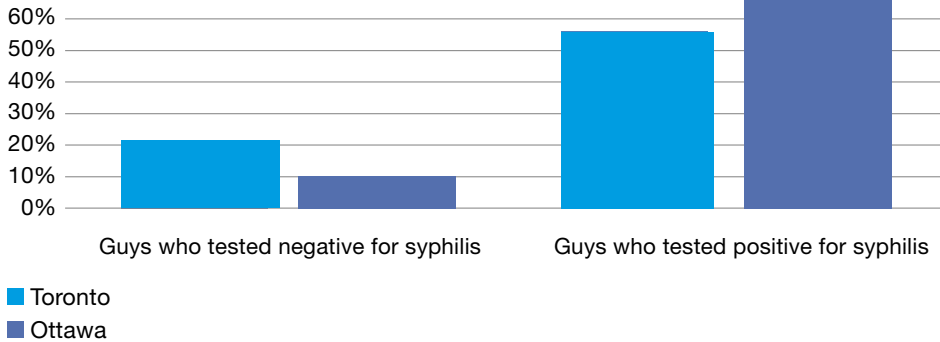
About one in ten had a history of syphilis (past or present)

The syphilis test used in this study detected the presence of *Treponema pallidum* antibodies, indicating any history of syphilis, whether currently active or in the past. According to this measure, the prevalence of syphilis (past or present) was 10.5% in Toronto and 6.9% in Ottawa. The overall prevalence of past or current syphilis among Lambda participants was 9.4%. (The percentages for HCV and syphilis are drawn from the 1,104 men who provided fingerprick blood samples.)

Men from either city who tested positive for either HCV or syphilis were more likely to be HIV-positive than those who did not. (For guys with HCV, much of this was likely due to needle use.) See HIV prevalence by hepatitis C status.



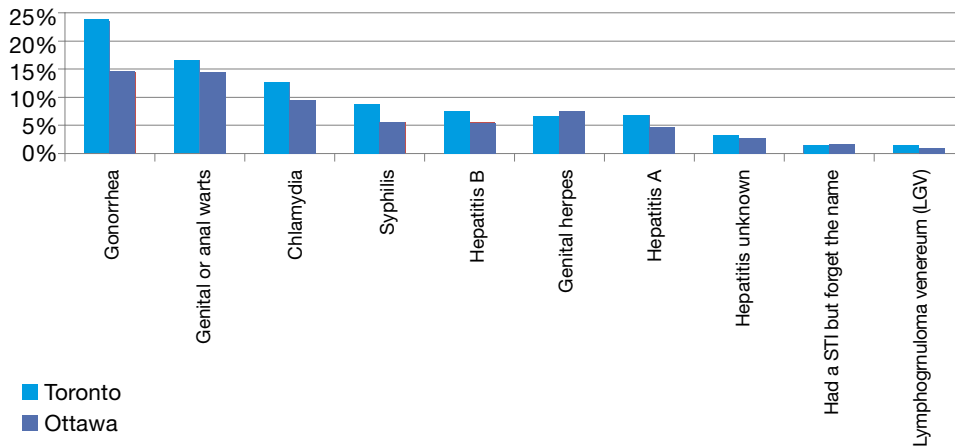
HIV prevalence by syphilis



Other sexually transmitted infections (STIs)

Regardless of whether or not they provided a blood sample, men who participated in the study were asked about their history of sexually transmitted infections (STIs). Their self-reported histories of STIs are shown in History of sexually transmitted infections (STIs).

History of sexually transmitted infections (STIs)



How often did men get tested for HIV?

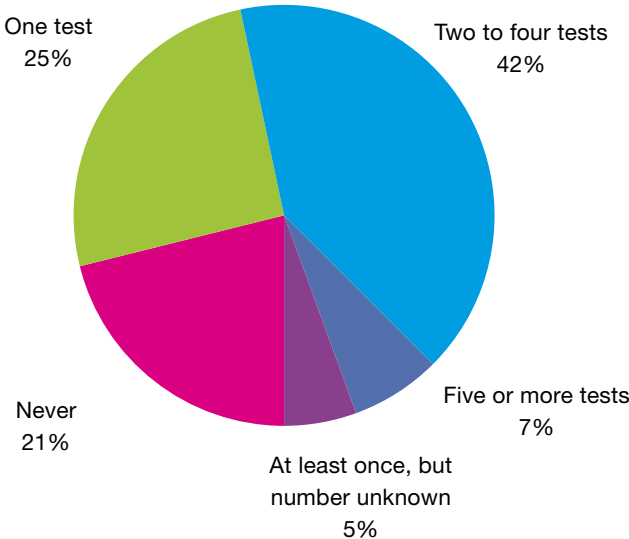
Most participants had been tested for HIV at least once

Most participants—87.7% in Ottawa and 86.9% in Toronto—reported that they had been tested for HIV at least once in their lifetime. Almost 12% (11.3% in Ottawa, 11.7% in Toronto) had never had an HIV test. The remaining few (1.1% in Ottawa, 1.4% in Toronto) were not sure whether they had or had not had a test.

How often did respondents get tested?

A somewhat smaller majority—78.8% (77.5% in Ottawa, 79.2% in Toronto)—had been tested for HIV at least once within the past two years. Many of these men were tested more than once in that two year period: see How many times did men get tested in the past two years?

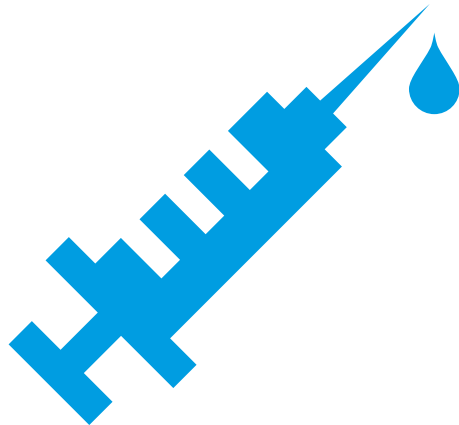
How many times did men get tested in the past two years?



Who is not getting tested?

Participants who reported never being tested were more likely to:

- be younger – in those aged 16 to 19 (46.2% have never tested) and 20 to 24 (25.9% have never been tested);
- be poorer – those with annual incomes below \$29,999 were less likely to test than those with incomes of at least \$30,000, with the lowest rates of all at incomes below \$10,000;
- be south Asian or southeast Asian (22% have never tested) or Afro-Caribbean (17% never tested); and
- have smaller numbers of male sex partners in the past six months (76.4% with no male partners in the past six months, 86.8% with only one).



Almost 12% (11.3% in Ottawa, 11.7% in Toronto) had never had an HIV test.





46%

cruise in gay bars



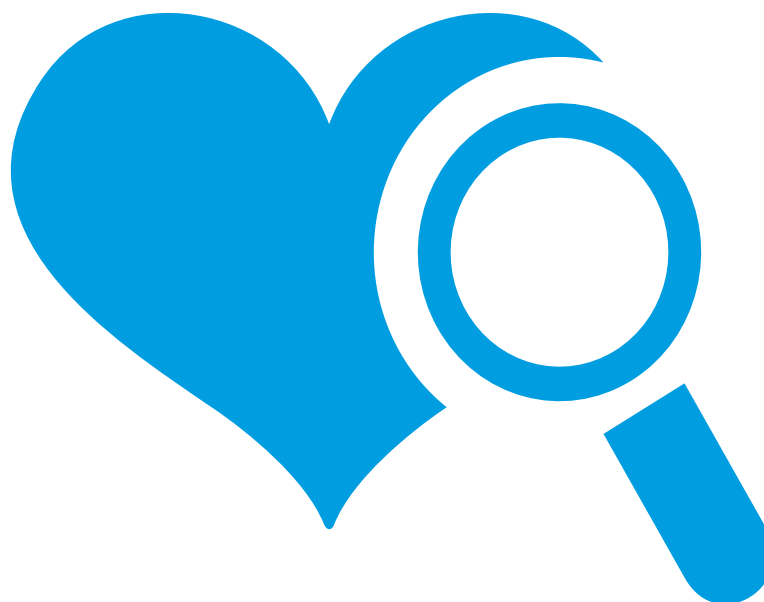
42%

cruise online



39%

cruise in Saunas/bathhouses



Where did men cruise?

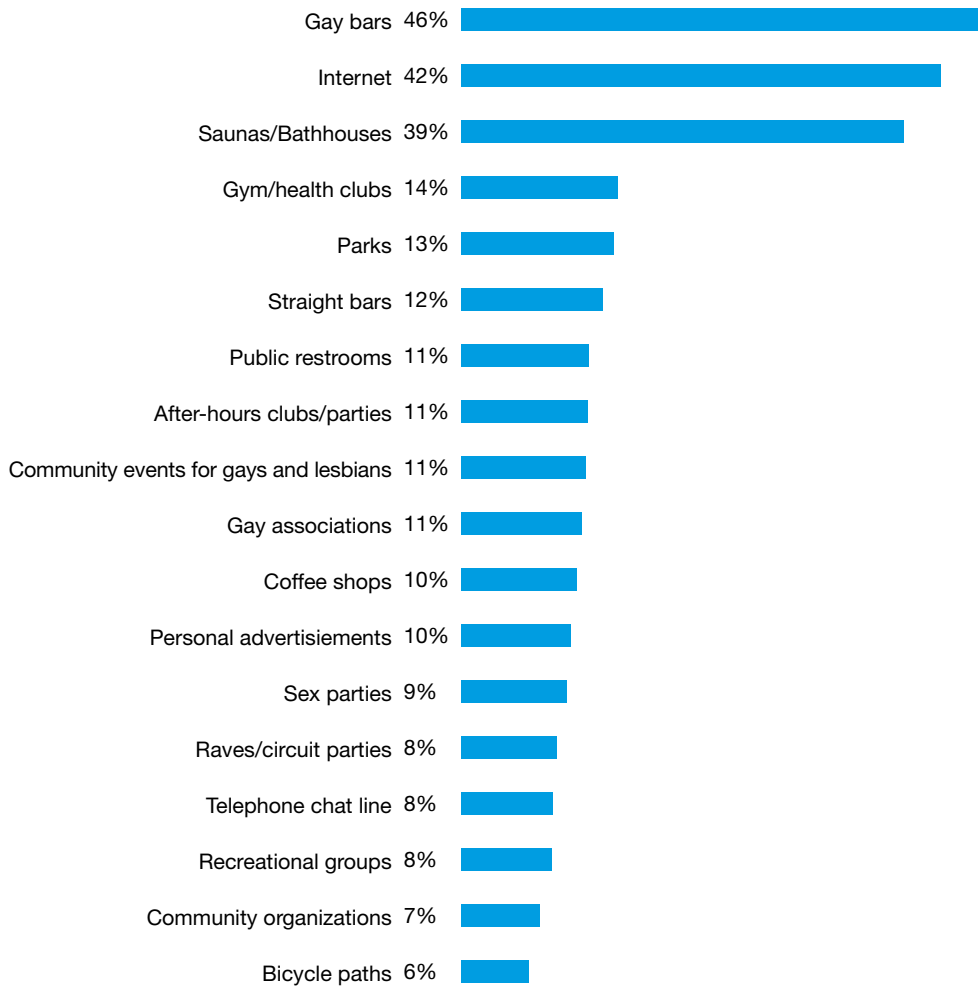
Top three cruising grounds: bars, baths and the internet

Study participants were asked how and where they looked for sex with other men. Bars, bathhouses, and online cruising sites were the most common means of cruising. Online sites were widely used but by no means appear to have replaced bars as cruising spots: nearly half the men in the study (46.2%) used gay bars as spots to meet other men for sex, and 42.2% used the net. Bathhouses were the third most often used, used by 42% of the men in Toronto and 27.2% of those in Ottawa (38.9% overall). (Bars and the net were used by similar numbers of men in both cities.)

And in fourth place... everywhere else.

As well as bars, baths and the internet, the men in this study reported looking for (and finding) sex in a multitude of other venues, including gyms, parks, bicycle paths, public restrooms, parties, community events and gay groups and associations (see figure 10). For the most part, usage was similar between Ottawa and Toronto, although more men from Toronto looked for sex at raves/circuit parties, sex parties and through personal ads.

Where did men look for sex in the past six months?





HIV

rates remain high



a significant number of
men are HIV positive and
do not know.



Wrapping it up

What did we learn from the Lambda study?

First, it seems clear that many of us are making an effort to be safe and to keep our partners safe. However, Lambda and other studies indicate that HIV continues to spread in our community at an unacceptably high rate and that a significant number of gay men in Toronto and Ottawa engage in high risk behaviours. Also, a significant number of us who think we are HIV-negative are actually HIV-positive but don't know it because we haven't been recently tested for HIV. This has huge implications for HIV transmission, given that many of us who took the survey said we'd had anal sex without a condom at least once in the past six months.

While condoms are an important part of safer sex, it's clear that we also need to think about how we interact with each other. We need to examine some of the assumptions we make when we have unprotected anal sex—assumptions that can place us at risk for getting or passing on HIV. We need to look at the ways in which we use substances and the reasons for it. We need to look at how often (or not) we get tested for HIV and other STIs.

Gay and bisexual men have made great efforts to reduce new HIV infections over the past thirty years. We need to continue to make sure that each one of us— those of us who have been around for some time, those of us just coming out or starting to have sex, those of us who are HIV-positive and those of us who are HIV-negative—takes care of our own health and the health of the other men in our communities.

