

# STAFF REPORT INFORMATION ONLY

# **Sexual Health in Toronto 2007**

Date:	September 28, 2007
To:	Board of Health
From:	Medical Officer of Health
Wards:	All Wards
Reference Number:	

## **SUMMARY**

This report provides current epidemiological data on sexually transmitted infection rates (STIs), and sexual behaviour in Toronto and a program update on Toronto Public Health (TPH) sexual health programs and services subsequent to the 2004 Board of Health report *Strategies to Address the Increase in Sexually Transmitted Infections in Toronto*.

In Toronto, STIs accounted for 66% of all reported diseases. Identification, treatment, follow-up and prevention of STIs is a substantial component of the work of TPH. Current data show an increase in reports of chlamydia, gonorrhea, HIV and late latent syphilis. In part, this increase can be attributed to more sensitive tests and an increase in testing. Despite high STI rates, Toronto has the second lowest chlamydia and gonorrhea rates and the lowest infectious syphilis rates when compared to Canada's other large urban areas.

Research shows that age at first intercourse has not changed in recent years. However, there is a slight increase in the number of people reporting multiple sexual partners. Condoms and birth control pills are the two most common forms of contraception for people under 25 years of age. The rate of consistent condom use among youth remains around 40%. Teen pregnancies and abortion rates have been decreasing steadily for many years.

TPH's Sexual Health Programs include sexual health clinics, STI case management, sexual health promotion, The Works Needle Exchange, The AIDS and Sexual Health Info Line, condom distribution, AIDS Prevention Community Investment Program and purchase of service agreements. While the Sexual Health Programs have received enhancements since 2004, demand for services often exceeds capacity.

TPH's sexual health programs use a variety of innovative tools and strategies to identify needs and trends and to plan and implement responsive and effective programs and services. Toronto Public Health will continue to monitor current epidemiological evidence and social research to ensure that TPH's Sexual Health Programs address the evolving needs of the community.

## **Financial Impact**

There are no financial implications resulting from this report.

#### **ISSUE BACKGROUND**

In October 2004, The Board of Health adopted the report titled *Strategies to Address the Increase in Sexually Transmitted Infections in Toronto*. This report documented an increase in incidence rates of most STIs in Toronto. Included in this report was an overview of TPH sexual health programs and services designed to address the rising incidence rates.

#### COMMENTS

#### 1. Sexual Health Data

# Trends in Reportable Sexually Transmitted Infections in Toronto <sup>1</sup>

Sexually transmitted and bloodborne infections are caused by agents found in body fluids such as blood, semen, vaginal secretions and breast milk. Transmission occurs primarily from person to person through sexual intercourse, through needle sharing and perinatally from mother to infant and through breast feeding. This group of diseases includes chlamydia, gonorrhea, HIV, syphilis, hepatitis B and hepatitis C, and accounts for 66% of all reportable diseases in Toronto in 2006.

Recent disease trends for chlamydia, gonorrhea, HIV and late latent syphilis show increased reports in 2006. In contrast, hepatitis B and hepatitis C reports both declined to the lowest levels observed in the previous 11 year surveillance period.

## Chlamydia:

Rates of chlamydia have been steadily increasing in Toronto since 1997. (See Attachment 1) In 1997, the chlamydia rate in Toronto was 157.7 cases per 100,000 which increased to 247.1 cases per 100,000 in 2005. This increase has been driven for the most part by increased reporting among males. Urine testing for chlamydia, introduced in 1994, has made testing easier and more available to males. Chlamydia rose 5% from 2005 to 2006 with a 2006 rate of 258.7 per 100,000. For the last ten years, males and females aged 15 to 24 years have consistently had the highest rates of chlamydia.

The 5% increase in 2006 in chlamydia reports is largely attributed to an increase in the rate among females. This is the first increase in chlamydia rates observed among females since 2002. In October 2006, TPH's Taking Action on Chlamydia social marketing

campaign started to promote testing of women ages 15-24 years. Preliminary data from the provincial public health laboratory, one of several laboratories that carry out chlamydia testing, indicate an increase in chlamydia testing from 2005 to 2006. However the percentage of positive tests has remained the same during this time period. This suggests that the rise in chlamydia reports is due to an increase in testing rather than an increase in incidence of infections.

#### Gonorrhea:

As with chlamydia, males and females aged 15 to 24 years have consistently had the highest rates of gonorrhea for the last ten years. <sup>2</sup> Gonorrhea rates for all ages have fluctuated since 1996 (62.3 cases per 100,000) with a peak in incidence occurring in 2003 (70.6 cases per 100,000) followed by a decrease in rates (see Attachment 1).

However, between 2005 and 2006 there was a 10% increase in gonorrhea reports. This increase is largely attributed to an increase in gonorrhea rates among males. More specifically, in 2006 a 27% increase in rates was observed among 35-44 year old males. Increases were noted among males reporting multiple sex partners in the last six months and men who have sex with other men (MSM).

#### HIV:

Following 3 years of relatively stable rates, reports of HIV increased 18% from 2005 to 2006. In 2006, the HIV rate for Toronto was 24.8 cases per 100,000, the highest rate in the previous 11 year surveillance period (see Attachment 2). Increased rates were observed among both males and females, however a much greater proportion of the increase was observed among females. New HIV diagnoses from HIV-endemic countries increased 50%, from 104 cases in 2005, to 156 cases in 2006. Some of the increase in HIV appears to be due to increased HIV positive immigrant/refugee arrivals at the time of the AIDS conference held in Toronto in August 2006.

Although there was a greater increase in the proportion of cases in females, the most commonly reported exposure category for acquiring HIV continues to be MSM, which increased 7% from 2005 to 2006. MSM accounted for more than half of new HIV-infected individuals in Toronto in 2006.

Data from I-Track, an ongoing risk and prevalence surveillance research study, reveal that the average seroprevalence of HIV among Injection Drug Use (IDU) that participated in the study in seven Canadian cities was 13% in 2006. Toronto's seroprevalence was 8% which was the second lowest of the seven cities. Injection drug users are also vulnerable to Hepatitis C. Among the IDU tested in Toronto through the 2006 I Track study, 68% tested positive for Hepatitis C.

Ontario Prenatal HIV testing data indicate that the proportion of women being tested for HIV while pregnant, has increased steadily from 1999 (46%) to 2007 (95%), averaged over all Ontario public health units. <sup>5</sup> The current proportion of Toronto prenatal testing

(95.1%) is consistent with the provincial average (95%). From January 1999 to June 2007, there have been 145 positive tests found through prenatal HIV testing in Toronto. Compared to other Ontario health units, Toronto has the highest prenatal HIV positivity rate in the province. <sup>6</sup>

## Syphilis:

Toronto infectious syphilis rates had been rising since 2002 when an outbreak of infectious syphilis began among MSM. At the peak of the outbreak in 2004, the infectious syphilis rate for Toronto was 14.4 cases per 100,000. In 2005, the infectious syphilis rate dropped to 9.8 cases per 100,000, the first substantial decrease since the outbreak began. The rate plateaued in 2006 at 9.4 cases per 100,000 (see Attachment 2). MSM accounted for 78% of new infectious syphilis cases in Toronto in 2006.

With the introduction of a more sensitive enzyme immunoassay test in August 2005, late latent syphilis rates have increased substantially following previous years of stable levels. Rates doubled in both males and females in 2006 compared to 2005.

Herpes and Human Papillomavirus (HPV)

Herpes and HPV also have high prevalence rates which is of concern given the health consequences of both of these viruses. Herpes has been identified as an important cofactor in HIV transmission and HPV causes almost all cases of cervical cancer. <sup>7 8</sup> However, since these diseases are not reportable there are no consistent data available.

#### **Sexually Transmitted Infections in Other Urban Centres**

A comparison of 2005 STI rates in Montreal, Toronto, Vancouver, Edmonton (Capital Health Region), San Francisco, New York City, Chicago and London, UK indicates that rates in the US tend to be higher than the UK and Canada and that Toronto's rates are lower than most other large Canadian cities. 9 10 11 12 13 14 15 16

Increases in chlamydia rates from 2000 to 2006 were observed in all four Canadian cities. Of the four Canadian cities, Toronto had the second lowest chlamydia rate in 2006. Rates of gonorrhea increased in all Canadian cities in 2006 except Vancouver whose rates have varied considerably from 2000 to 2006. Again, of the four Canadian cities, Toronto had the second lowest rate of gonorrhea in 2006. With respect to infectious syphilis, all four Canadian cities experienced outbreaks over the past several years. Of the four Canadian cities, Toronto had the lowest rate of infectious syphilis in 2006. <sup>17 18 19</sup> <sup>20 21</sup>

#### **Sexual Behaviour**

The Canadian Community Health Survey (CCHS) provides cross-sectional estimates of health determinants, health status and health system utilization for 136 health regions across the country. This national survey takes place every two years to allow for

comparison over time. Data are currently available for 2001, 2003 and 2005. This survey has a module on sexual behaviours. Information below is presented for Toronto respondents when available and otherwise for all participants (national).

Toronto CCHS data documents that age at first intercourse has not changed significantly from 2001 to 2005. Approximately one quarter of Torontonians experience their first sexual intercourse by age 16 years, about half do so by age 18 years and three quarters by 21 years old. <sup>22</sup>

The 2005 survey shows that 86% of respondents reported having just one sexual partner over the previous 12 month period. This study does however show a slight increase in number of sexual partners reported over the last 12 month period for participants aged 15 to 49 years in Toronto. Participants reporting one sexual partner over the last 12 months decreased slightly while those reporting two, three and four or more partners increased. <sup>23</sup>

National CCHS data shows that males (37%) are more likely than females (25%) to have had multiple partners. Individuals who became sexually active at a younger age were more likely to have multiple partners relative to those who had their first experience when they were older. Higher proportions of youth 15 to 19 years of age had had multiple partners in the past year compared to young people aged 20 to 24. <sup>24</sup> This likely reflects a tendency towards longer-term monogamous relationships at older ages.

## **Contraception and Condom Use**

Toronto CCHS data reveals that among survey respondents under 25 years of age, condoms are the most common form of birth control. Seventy-eight percent report condoms as their usual method of birth control in 2005; up 4% from 2003. The second most common method of birth control is the birth control pill. Sixty one percent of respondents reported the pill as their usual method; a 10% increase from 2003. <sup>25</sup>

However, national CCHS data indicate that almost 40% of sexually active 15 to 24 year olds had not used a condom the last time they had intercourse. Even though 78% of youth reported condoms are their usual method, many are not using condoms for every act of intercourse leaving them vulnerable to pregnancy and STIs. <sup>26</sup>

National CCHS data demonstrates the importance of age at first intercourse. Females who start having sexual intercourse at younger ages are less likely to use condoms regularly. About 60% of those who started having sex by age 13 reported not using a condom the last time they had sex, compared to 46% who began having sex at ages 14 to 17 and 37% who began at ages 20 to 24. <sup>27</sup> Toronto CCHS data show that 3% of Torontonians experienced their first sexual intercourse by age 13 years. <sup>28</sup>

Within the age range 15 to 24 years, youth aged 20 to 24 were less likely to have used a condom the last time they had sex likely due to entering longer term relationships where condom use is perceived as less of a concern. Of note is that reports of not using a condom were nearly twice as high for young Aboriginal males. <sup>29</sup>

## **Teen Pregnancy**

Toronto teen pregnancy rates are based on recorded live births, induced abortions and miscarriages per 1,000 of the population of females ages 15 to 19. Teen pregnancy rates in Toronto have decreased steadily from 51.7 in 1997 to 31.0 in 2004 <sup>30</sup> (see Attachment 3). This follows a similar pattern to national teen pregnancy rates. <sup>31</sup>

In Canada, the rate of teen pregnancies has decreased from 49.2 in 1994 to 32.1 in 2003. International comparison of 2002 data shows that teens in Canada have a lower pregnancy rate (33.9) than those in England and Wales (60.3) or the United States (76.4).<sup>32</sup>

Abortion rates have also dropped. The birth/abortion rate has declined in all three countries since 1990. <sup>33</sup> The teen abortion rate in Canada is also lower (18.4) than that of England and Wales (24.1) and the United States (21.7) however not substantially so. This indicates that teens in Canada get pregnant less often than those in England and Wales and the United States however more often choose to terminate the pregnancy. <sup>34</sup>

## 2. TPH Sexual Health Programs

Sexual health and HIV/AIDS prevention is mandated by the Ontario Ministry of Health and Long Term Care. Toronto Public Health's sexual health programs are multifaceted and based on TPH's strategic directions. Priorities are established according to epidemiological evidence and social behavioural research, and evidence-based strategies that incorporate a "social determinants of health" approach are adopted.

Toronto has a large, diverse and growing population which requires substantial proficiencies in terms of language and cultural competencies to deliver quality care and services. Developing the capacity to care effectively for this large, diverse and complex city is a constant imperative. Collaboration with community partners and other government agencies is an essential strategy in our program. A summary of the key elements of the Sexual Health Program is provided below with a focus on how the program has evolved since 2004.

#### **Sexual Health Clinics**

TPH directly operates five TPH clinics, staffs five partnership clinics with Community Health Centres and provides funding to three external clinics. All the clinics provide HIV testing and referral, STI testing and free treatment, free condoms, low cost and /or free birth control, pregnancy testing, options counselling and referral as well as sexuality and relationship counselling. Clients of the clinics include women under 25 years, men under 30 years, anyone diagnosed with an STI and their partner. The clinics also provide services to people who experience barriers in accessing health care, e.g. people with limited English, recent immigrants and those without health coverage.

The Sexual Health Clinic Program received small budget enhancements in 2005 and 2006. A new partnership with a community health centre at Jane and Wilson was established in 2005, thereby making services available in an underserved part of the city. In 2006, total clinic visits numbered 57,386, a 12% increase since 2003.

Despite the enhancements, demand for services at the clinics continues to exceed capacity. TPH conducted a clinic evaluation in 2005. The evaluation found that 16% of all clients seeking services at TPH sexual health clinics were turned away and over 80% of clients waited over three weeks for an appointment.

The Ministry of Health and Long Term Care recently announced that Point of Care (POC) HIV tests will be made available free of charge through designated test sites, including public health unit clinics. The POC test is a reliable test that screens for antibodies to HIV in blood taken from a finger prick. Results are available within a few minutes, unlike the traditional HIV test which can take up to two weeks. A test that shows the presence of antibodies requires additional testing to confirm results. If a test does not show the presence of antibodies, then the client is considered to be negative (free of HIV infection) unless they are in the window period for HIV infection (up to three months after exposure).

The Sexual Health Clinics Program will be adding POC testing to selected clinics in the fall of 2007. It is anticipated that the launch of this test will increase calls to the AIDS and Sexual Health InfoLine, increase clients requesting HIV testing at our clinics, and potentially increase STI Case Management. However, once the initial increase has stabilized, the POC test could reduce client visits by streamlining the testing process since clients testing negative will not require a follow up appointment.

#### **STI Case Management**

The STI Case Management Program provides treatment, partner notification, contact tracing for reportable STIs and HIV, counselling on safer sex, referrals to community agencies for clients and education for other health professionals as well. The budget enhancements received since 2004 have helped to alleviate the pressures of increasing case loads.

Since 2004, TPH has conducted periodic short term outreach strategies in bath houses where staff conduct on site syphilis tests and awareness raising. Challenges for STI Case Management include increasing caseloads due to a rise in reported STIs and a new, more sensitive syphilis test which identifies more positive results. HIV case management has increased in complexity for a number of reasons including the legal climate surrounding HIV and factors associated with immigration and culture. As more cases of HIV are being diagnosed in persons from diverse cultures, the skills and knowledge of STI staff must also grow in order to provide competent and appropriate service.

#### **Sexual Health Promotion**

The Sexual Health Promotion Program promotes healthy sexuality and prevention of STIs (including HIV) and unwanted teen pregnancies. Strategies include identifying priority populations most affected by high STI and teen pregnancy rates in order to reduce health inequalities. The Sexual Health Promotion staff work in partnership with the community and provide training and workshops to other health care professionals and service providers working with priority populations. The Sexual Health Promotion Program supports sexual health education in schools, workplaces, community agencies, women's groups, correctional institutions and addiction services.

There have been numerous new projects undertaken by sexual health promotion since 2004. The *Taking Action on Chlamydia* (TAOC) campaign calls for health care providers to increase testing for chlamydia, to talk about sexual health matters and to promote condom use. In addition, the campaign specifically targets youth in priority neighbourhoods where the incidence of chlamydia and other STIs are higher. Chlamydia is a major contributor to infertility in women and is often present without symptoms, which is why screening is important. This campaign was initiated as a result of rising rates of chlamydia across Toronto. Across Canada and within Toronto, chlamydia is the most common reportable STI and reported rates are highest among females aged 15-24 and males aged 20-24.

Mapping of epidemiological data identifies disproportionately high prevalence of chlamydia in specific neighbourhoods. Some of these neighbourhoods also have high teen pregnancy rates, low income and less access to services. Consequently, efforts towards sexual health promotion and chlamydia reduction focus on young women living in these high priority neighbourhoods in Toronto. Developing sexual health promotion strategies for young women is particularly critical as untreated chlamydia can lead to serious health problems.

TPH is also launching two new initiatives using newer technologic tools. "InSpot" is an online partner notification website that allows users to send anonymous or non-anonymous electronic cards to their partners to notify them of a possible exposure to an STI. <sup>35</sup> Secondly, "SexINFO" allows users to access sexual health information via their cell phones, e.g. what to do if the condom broke, how to know they are ready for sex, etc., and includes contact information for local treatment, information and support services.

The implementation of the Human Papillomavirus (HPV) vaccine program with Grade 8 girls commenced this fall in Toronto. Sexual Health Promotion staff are collaborating with the Vaccine Preventable Diseases Program to ensure that sexual health primary prevention messages are offered in the schools.

The *Raising Sexually Healthy Children* Program has been expanded to include six more languages with the help of Ontario Trillium Foundation funding and has an increasing presence in the Francophone schools.

TPH conducts regular "HIV 101" modules for public health staff and the community. These sessions have been revamped to include a determinants of health perspective, cultural competency and values clarification within an anti-oppression framework.

To accompany increased teacher training on puberty and growth and development, a video was produced for training teachers in sexual health entitled "*Teaching Puberty-You can do it*". This program includes a website which provides resources and referrals.<sup>36</sup>

Because sexual health education primarily occurs through the physical education curriculum at the secondary level and students can choose not to take physical education after Grade 9, many high school students don't have access to sexual health education. Therefore an important part of TPH's sexual health program is reaching youth outside of school in community venues in partnership with other youth serving agencies.

And lastly, the Sexual Health Promotion program is involved in international work with the *Kicking AIDS Out (KAO) Network* which integrates physical activity and sexual health promotion. The sexual health team is mentoring the KAO Network by supporting the development of their sexual health curriculum.

## The Works Needle Exchange Program

The City of Toronto's Needle Exchange Program "The Works", is a harm reduction initiative. Harm reduction recognizes that some people will continue to use drugs and attempts to reduce the adverse consequences of drug use. The mandate of the program is to reduce the spread of communicable diseases among drug users. This program offers safer injection and safer crack smoking equipment, crisis intervention and counselling, condom distribution, a methadone program, HIV and Hepatitis testing, vaccination and peer training, education and outreach. Services are provided through a fixed site, a mobile program and street outreach. Needle exchange services are also provided under contract with 30 community partners throughout Toronto.

Since 2004, The Works has received budget enhancements from the City of Toronto and Ministry of Health and Long Term Care (MOHLTC) that has enabled the expansion of the methadone program. This program is now providing methadone service to 70 high risk/needs patients. Funding was also received for a social worker to work with community agencies and staff to ensure consistent high quality service delivery to the target population.

The Works began distributing safer crack use kits in Spring 2006. This initiative followed from a recommendation in the *Toronto Drug Strategy* that calls for the City to expand harm reduction outreach strategies including the provision of safer crack use equipment. The *Toronto Drug Strategy* is a comprehensive municipal strategy for alcohol and other drugs based on the four integrated components of prevention, harm reduction, treatment and enforcement. Toronto City Council adopted the drug strategy and its recommendations in December 2005. <sup>37</sup>

The number of needles distributed through The Works and its partner agencies increased 48% (from 453,778 in 2004 to 669,420 in 2006) while the number of client visits increased 152% (from 10,350 to 26,100) during the same time period. These increases are likely due to a number of factors: increased and improved outreach, excellent staff connection with clients, increased referrals from agencies and the increased client capacity of the methadone program.

Anecdotal reports from needle exchange programs in Toronto indicate that the injection of oxycontin has increased during the last 18 months, which may explain part of the increase in requests for needles and visits to needle exchange programs during the same period. The most recent information on patterns of drug use is not yet available from the 2007 round of I-Track surveys. When available, these data will assist in putting the increase in demand for services into context.

The Works was also involved in the development of Best Practice Recommendations for Needle Exchange Programs in partnership with Ontario Needle Exchange Coordinating Committee which won a Kaiser Award this year.

The Works is participating in the I-Track HIV and Hepatitis C surveillance and risk factor study of drug users.

In terms of future work, this program is planning to recruit two additional community agencies to participate in the delivery of needle exchange services per year for the next few years. The Works is also exploring the possibility of providing primary health care at The Works fixed site and the possibility of implementing the use of *Narcan* (used to treat overdoses of narcotic medications) in the overdose prevention project. POC HIV tests will also be available for clients of The Works starting in the fall of 2007.

#### AIDS and Sexual Health Info Line

The AIDS and Sexual Health Info Line is a province wide, 100% provincially funded, counselling line operated by TPH that offers service in sixteen languages. The service provides free, anonymous phone counselling, information and referrals on a variety of concerns including HIV/AIDS, STIs, birth control, gender issues, clinic referrals, drug use and harm reduction. The line receives approximately 35,000 calls annually, 70% of which originate in Toronto. Service is available seven days a week.

This info line is exploring providing e-counselling for youth aged 12 to 24, who are likely to be more comfortable using the internet than talking to a counsellor. The Info Line is also collaborating with the MOHLTC in providing information and referrals in their roll out of POC HIV testing.

### **The Condom Distribution Program**

The Condom Distribution Program distributes sexual health supplies to over 300 community agencies across the city. In 2007, approximately 4 million male condoms, 350,000 packets of personal lubricant and 25,000 female condoms will be distributed. Despite a budget increase in 2004, the Condom Distribution Program provides only approximately 75% of quantities requested by community agencies.

Since 2004, female condoms have become a standard component of the Condom Distribution Program. Female condom training for community agency staff is ongoing with approximately 100 service providers trained yearly.

## **AIDS Prevention Community Investment Program**

The purpose of the AIDS Prevention Community Investment Program (APCIP) is to fund community groups to provide culturally and linguistically appropriate HIV prevention programs. Funding allocations are determined through a competitive process whereby applications are adjudicated by a review panel which consists of City of Toronto councillors, Board of Health members and community experts. <sup>38</sup>

APCIP builds community capacity and enables TPH to serve hard to reach populations. Priority populations include gay and bisexual men, injection drug users, people from countries where HIV is endemic, women and youth. Investing in communities is an important strategy to address health inequalities.

APCIP has received a number of budget enhancements since 2004 which increased the average grant size from \$26,741 to \$33,640. This year, 45 projects have been funded.. As a legacy to the International AIDS conference, the Global AIDS Prevention Initiative was established. <sup>39</sup> This year funding of \$100,000 was awarded to *Schools Without Borders* to support the City of Toronto's HIV/AIDS capacity building partnership with South East District Botswana. In subsequent funding years, it is intended that this initiative will fund international HIV/AIDS partnerships addressing the growing global epidemic.

APCIP is project-based funding and agencies without core funding have difficulty meeting the criteria for City grants. Hence, a continuing challenge for APCIP is supporting AIDS prevention work in priority neighbourhoods given the lack of established organizations.

Overall the AIDS Prevention Community Investment Program expands the reach of AIDS prevention efforts across the city and has served to establish and strengthen many important partnerships and collaborative efforts.

## **Purchase of Service Contracts**

Purchase of service contracts are ongoing contractual agreements with community based service providers who have the capacity to provide the required services. TPH funds two purchase of service contracts to provide sexual health services to vulnerable populations across the City.

- a) AIDS Committee of Toronto (ACT, www.actoronto.org) provides a range of outreach, advocacy, prevention, education, awareness initiatives and support services for MSM. TPH funds ACT to provide education to gay and bisexual men and service providers, to conduct community based research initiatives, to participate in M-Track (MSM behavioural surveillance research) and to apply current research findings to prioritize and plan programming.
- b) Planned Parenthood Toronto (PPT, www.ppt.on.ca) is a community-based, prochoice agency committed to the principles of equity. Their accessible and inclusive services promote healthy sexuality and informed decision making. TPH funds PPT to provide the Teen Sex Infoline for youth 13 to16 years; Spiderbytes.ca website, email and MSN messaging; community outreach with peers; and youth volunteer training. PPT is currently surveying 1500 youth in Toronto to assess decision making around using sexual health care services. Once available, results from this research will inform TPH work with youth. In addition, this purchase of service agreement supports the Women2Women program which recruits, trains and supervises volunteers to provide sexual health information to immigrant women at the Bay Centre for Birth Control.

# 3. Priority Populations

Recent Toronto STI data show increases in the number of chlamydia, gonorrhea and HIV cases being reported to public health. In contrast, the rates of syphilis, hepatitis B and hepatitis C are stable. Our surveillance data indicate three priority populations for TPH sexual health programs: youth, men who have sex with men and people from countries where HIV is endemic. The section will summarise ongoing and future work in these areas.

#### Youth

As this report highlights, the teen pregnancy rate in Toronto is decreasing. Preliminary laboratory reports indicate that rates of positive chlamydia tests are remaining stable. While these trends are encouraging, there is much more work to be done to ensure the sexual health of the diverse youth population across the City. Evidence shows inconsistent condom use among youth and more youth are reporting multiple sex partners. The literature illustrates that early sexual intercourse carries a heavy burden of risk with regard to condom use and having multiple sex partners. Youth aged 15 to 24 years remain the age category with the highest risk for both chlamydia and gonorrhea.

TPH has a number of programs and supports targeted toward youth. The purchase of service agreement with PPT funds programs specifically designed for youth. APCIP allocates 33% of funding to youth projects. The TPH *Taking Action on Chlamydia* campaign encourages youth to get tested and treated. Considerable efforts are focussed on *Raising Sexually Healthy Children* with the community as well as teacher training in puberty and healthy sexuality. Primary sexual health education messages will also be available at schools during the implantation of the HPV vaccine.

New communication technologies are a promising avenue for reaching youth. To this end, youth can notify sexual partners of a possible exposure to a sexually transmitted infection through InSpot and will soon be able to access health information through text messaging on their cell phones with SexInfo. TPH is also working towards providing ecounselling through the AIDS and Sexual Health Info line in the future.

## Gay and Bisexual Men

Gay and bisexual men are at a disproportionately higher risk of acquiring STIs. Among all reported cases with known risk factors, MSM accounted for over a quarter of new gonorrhea cases, more than half of new HIV-infected individuals and 78% of new infectious syphilis cases in Toronto in 2006. TPH's work in this area includes funding external groups, Toronto Public Health programs and collaborating with external agencies.

The AIDS Prevention Community Investment Program allocates 15% of funding to MSM projects. The purchase of service agreement with ACT provides a wide range of prevention, education, and awareness initiatives tailored to gay and bisexual men. TPH continues to collaborate with ACT in rolling out a Syphilis awareness campaign. TPH MSM programming includes coordinating syphilis outreach programs and the Gay Men's Health Committee. It is anticipated, given experience in other urban centres already using this service, that InSpot will be a tool also used by MSM. InSpot has customized messages for MSM and TPH plans to advertise InSpot to the MSM community. In consultation with the owners of Toronto bathhouses, TPH is developing the resource *Public Health Information for Toronto Bathhouses* to assist operators in minimizing health risks for staff and patrons within Toronto bathhouses. TPH is also participating in the AIDS Bureau's MSM Strategy which includes Pos Prevention initiatives which seek to maintain and improve the health of HIV positive men.

Future work includes acting on the findings of *Risk Management in Circuits of Gay and Bisexual Men: Results from the Toronto Pride Survey*. Traditionally, HIV prevention initiatives have regarded MSM as one homogeneous community or targeted efforts based on demographics such as age or ethno-cultural identities. This research emphasizes the importance of using knowledge of sexual micro cultures to develop multiple interventions for the MSM community. In addition this study highlights the importance of continuing basic HIV/AIDS prevention messages to reach new men just entering the MSM community.

External research in progress, such as the M-Track/Lambda Study and the MaBwana Study will inform the TPH MSM work. The M-Track/Lambda study will assess HIV prevalence, HIV and STI testing practices and sexual behaviour in MSM. The MaBwana Study, a community-based research study on black/African/Caribbean MSM in Toronto, will identify factors that may make this population vulnerable to HIV/AIDS by examining dating, sexual relationships and community issues.

## People from Countries where HIV/AIDS is Endemic

"HIV/AIDS endemic" is a term used by the WHO to categorize countries with high levels of HIV infection. Presently, many of the countries on this list are in Africa and the Caribbean. People who live in Canada who come from these countries and who test positive for HIV infection, are reported in this exposure category. This is the fastest growing exposure category in Ontario and accounts for a considerable number of Toronto's new HIV cases. APCIP allocates 50% of funding to projects geared towards people from countries where HIV is endemic.

TPH is a member of the African Caribbean Council on HIV/AIDS in Ontario (ACCHO). ACCHO has conducted training with TPH staff on the ACCHO produced *HIV Prevention Guidelines and Manual* and is collaborating with TPH to improve understanding of the partner notification process within this community. TPH has promoted ACCHO's social marketing materials. TPH has made presentations to the community health centre Women's Health in Women's Hands and other ACCHO solicited organizations on STIs, HIV, counselling and partner notification.

Herpes has been identified as an important cofactor in HIV transmission in this population. Exposure to HIV is more likely to result in HIV transmission in people with untreated Herpes. TPH plans to work in collaboration with ACCHO to develop the best strategy to identify and treat Herpes in this population to thereby reduce the probability of HIV transmission.

TPH makes an effort to hire front-line staff from countries where HIV is endemic, as well as other communities. This has been important in providing effective TPH services, for example, in the *Raising Sexually Healthy Children* Program. We have established partnerships with clinics that serve immigrants in Rexdale as well as at the Immigrant Women's Health Centre. The current phase of the *Taking Action on Chlamydia* campaign is targeting priority neighbourhoods which will include some members from this at risk population.

External research in progress that will inform TPH work, once data are available, includes E-Track HIV surveillance and research from the Ontario HIV Epidemiologic Monitoring Unit. E-Track is ongoing surveillance research which will assess HIV prevalence, HIV and STI testing practices and sexual behaviour among people from endemic countries. In March 2006, the Ontario HIV Epidemiologic Monitoring Unit conducted analysis to assess whether HIV infections with this population have been acquired in Canada or prior to arrival. This analysis estimates that 22-59%, depending on

the country of origin, of HIV infections with people from countries where HIV/AIDS is endemic occurred after their arrival in Canada. This has implications for the importance of preventing further transmission in Canada among people from Africa and the Caribbean. This analysis will be conducted again, incorporating additional data from Citizenship and Immigration Canada, if available. This next round of analysis has the potential to produce more robust data and is estimated to be available by the end of 2007.

#### CONTACT

Dr. Rosana Pellizzari
Director, Planning & Policy
and Associate Medical Officer of Health
Toronto Public Health

Tel: 416-392-7463 Fax: 416-392-0713

Email: <a href="mailto:rpelliz@toronto.ca">rpelliz@toronto.ca</a>

#### **SIGNATURE**

\_\_\_\_\_

Dr. David McKeown Medical Officer of Health

#### **ATTACHMENTS**

Attachment 1: Figure 1 - Incidence rates of Chlamydia and gonorrhea by year. Toronto, 1996-2006

Attachment 2: Figure 2 - Incidence rates of HIV and infectious syphilis by year. Toronto, 1996-2006

Attachment 3: Figure 3: Pregnancy rates for women aged 15 to 199 years by year. Toronto, 1997-2004

## Attachment 1

Toronto, 1996 - 2006 300 Reported cases per 100,000 population 250 200 150 100 50 0 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 163.4 157.7 185 204 211.2 220.9 240.5 240.4 240.4 247.1 258.7 - 🖶 - · Chlamydia 62.3 48.2 57.4 55.3 68.8 67.8 68 70.6 66.3 63.3 69.1 -Gonorrhea Source: Toronto Public Health[iPHIS] Data as of June 27th, 2007 Year

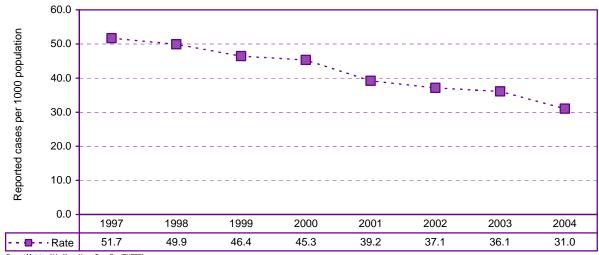
# Attachment 2

Figure 2: Incidence rates of HIV and infectious syphilis by year. Toronto, 1996 - 2006 27 Reported cases per 100,000 population 24 21 18 15 12 9 6 3 0 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 21.7 - 🖶 - · HIV 18 16.5 17 17.9 19.7 23.7 21.8 21.9 21.1 24.8 Infectious syphilis 2.4 1.4 8.0 1.1 1.3 1.1 7.4 12.6 14.4 9.8 9.4 Source: Toronto Public Health[iPHIS] Data as of June 27th, 2007

Year

# Attachment 3

Figure 3: Pregnancy rates for women aged 15 to 19 years by year. Toronto, 1997 - 2004



Data as of June 2003. August 2007

Year

#### References

\_\_

URL:http://www.toronto.ca/health/cdc/communicable\_disease\_surveillance/statistics\_and reports/annual reports/stdbloodborne.htm

\_

 $URL: http://www.phs.utoronto.ca/ohemu/doc/Prenatal\_tbls\_2007Q2.pdf$ 

 $URL: http://www.phs.utoronto.ca/ohemu/doc/Prenatal\_tbls\_2007Q2.pdf$ 

URL: http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/07vol33/acs-02/index\_e.html

URL:http://www.edmspc.com/Uploads/Tracking%20the%20TRENDS Part%202.pdf

URL: http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/07vol33/dr3306ea.html

<sup>&</sup>lt;sup>1</sup> Toronto Public Health [CDSU]. (2007). Sexually Transmitted and Bloodborne Diseases Communicable Diseases in Toronto 2006.

<sup>&</sup>lt;sup>2</sup> Toronto Public Health [CDSU]. (2007) *Incidence rates of gonorrhea by age group. Toronto, 1996-2006.* Data as of June 27, 2007.

<sup>&</sup>lt;sup>3</sup> Public Health Agency of Canada. (2006). *I-TRACK: Enhanced Surveillance of Risk Behaviours among Injecting Drug Users in Canada*. URL: http://www.phac-aspc.gc.ca/i-track/index.html

<sup>&</sup>lt;sup>4</sup> Public Health Agency of Canada. (2006). *I-TRACK: Enhanced Surveillance of Risk Behaviours among Injecting Drug Users in Canada*. URL: http://www.phac-aspc.gc.ca/i-track/index.html

<sup>&</sup>lt;sup>5</sup> Ontario HIV Epidemiologic Monitoring Unit. (2007). *Tables of prenatal HIV testing in Ontario*.

<sup>&</sup>lt;sup>6</sup> Ontario HIV Epidemiologic Monitoring Unit. (2007). *Tables of prenatal HIV testing in Ontario*.

<sup>&</sup>lt;sup>7</sup>Rebbapragada, A et al. (2007). Negative Mucosal Synergy Between Herpes Simplex Type 2 and HIV in the Female Genital Tract. *AIDS*, 21(5): 589-598.

<sup>&</sup>lt;sup>8</sup> Public Health Agency of Canada. (Feb 15, 2007). *Canada Communicable Disease Report - National Advisory Committee on Immunization statement on human papillomavirus vaccine.* 

<sup>&</sup>lt;sup>9</sup> Direction de santé Publique de Montréal, Vigie et Protection. (2006). *Taux d'incidence annuel par 100 000 personnes à Montréal de 2000 à 2006*. Fichier régional DCIMI. 15 avril 2007.

<sup>&</sup>lt;sup>10</sup> Edmonton Social Planning Council. (2007). *Tracking the Trends: Social Health in Edmonton*, 2007 Edition.

<sup>&</sup>lt;sup>11</sup> Gratrix, J et al. (2007). *Case Series Descriptive Analysis of a primary syphilis outbreak in Edmonton, Alberta, July 2004 - April 2006*. Canada Communicable Disease Report.2007; Vol 33, No 6.

<sup>12</sup> New York City Department of Health and Mental Hygiene. (2005). Bureau of Sexually Transmitted Disease Control, Annual Report 2005. URL:http://www.nyc.gov/html/doh/downloads/pdf/std/2005-annual-report.pdf

URL: http://msssa4.msss.gouv.qc.ca/fr/document/publication.nsf/4b1768b3f849519c852568fd0061480d/6b43b28437640e348525723000674e01? OpenDocument

URL: http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/07vol33/dr3306ea.html

<sup>&</sup>lt;sup>13</sup> Public Health Surveillance Unit, Vancouver Coastal Health. (2007). *Sexually Transmitted Infections (STI) crude rates per 100,000 population, Vancouver Health Service Delivery Area (HSDA)*. 20 June 2007.

<sup>&</sup>lt;sup>14</sup> Sante et Services Sociaux, Governemente du Quebec. (2006). *Portrait des infections transmissibles sexuellement et par le sang (ITSS) au Québec - Année 2005 (et projections 2006).* 

<sup>&</sup>lt;sup>15</sup> San Francisco Department of Public Health -STD Control Section. (2006). San Francisco Sexually Transmitted Diseases Annual Summary, 2005.
URL: http://www.sfdph.org/Reports/STD/SFSTDAnnlSum2005.pdf

<sup>&</sup>lt;sup>16</sup> London: Health Protection Agency, Centre for Infections. (2006). *The UK Collaborative Group for HIV and STI Surveillance. A Complex Picture. HIV and other Sexually Transmitted Infections in the United Kingdom: 2006.* November 2006. URL: http://www.hpa.org.uk/publications/PublicationDisplay.asp?PublicationID=55

<sup>&</sup>lt;sup>17</sup> London: Health Protection Agency, Centre for Infections. (2006). *The UK Collaborative Group for HIV and STI Surveillance. A Complex Picture. HIV and other Sexually Transmitted Infections in the United Kingdom: 2006.* November 2006. URL: http://www.hpa.org.uk/publications/PublicationDisplay.asp?PublicationID=55

<sup>&</sup>lt;sup>18</sup> Edmonton Social Planning Council. (2007). *Tracking the Trends: Social Health in Edmonton, 2007 Edition*. URL:http://www.edmspc.com/Uploads/Tracking%20the%20TRENDS\_Part%202.pdf

<sup>&</sup>lt;sup>19</sup> Gratrix, J et al. (2007). *Case Series Descriptive Analysis of a primary syphilis outbreak in Edmonton, Alberta, July 2004 - April 2006*. Canada Communicable Disease Report.2007; Vol 33, No 6.

<sup>&</sup>lt;sup>20</sup> Public Health Surveillance Unit, Vancouver Coastal Health. (2007). *Sexually Transmitted Infections (STI) crude rates per 100,000 population, Vancouver Health Service Delivery Area (HSDA)*. 20 June 2007.

URL:http://msssa4.msss.gouv.qc.ca/fr/document/publication.nsf/4b1768b3f849519c852568fd0061480d/6b43b28437640e348525723000674e01?OpenDocument

URL: http://www.statcan.ca/english/concepts/hs/index.htm

URL: http://www.statcan.ca/english/concepts/hs/index.htm

URL: http://www.statcan.ca/english/concepts/hs/index.htm

URL: http://www.statcan.ca/english/concepts/hs/index.htm

<sup>&</sup>lt;sup>21</sup> Sante et Services Sociaux, Governemente du Quebec. (2006). *Portrait des infections transmissibles sexuellement et par le sang (ITSS) au Québec - Année 2005 (et projections 2006).* 

<sup>&</sup>lt;sup>22</sup> Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1. Share file.

<sup>&</sup>lt;sup>23</sup> Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1. Share file.

 $<sup>^{24}</sup>$  Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1

<sup>&</sup>lt;sup>25</sup> Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1. Share file.

 $<sup>^{26}</sup>$  Statistics Canada. (2001, 2003, 2005). Canadian Community Health Survey. Cycles 1.1, 2.1 and 3.1

<sup>&</sup>lt;sup>27</sup> Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1

<sup>&</sup>lt;sup>28</sup> Statistics Canada. (2001, 2003, 2005). *Canadian Community Health Survey*. Cycles 1.1, 2.1 and 3.1. Share file.

 $<sup>^{29}</sup>$  Statistics Canada. (2001, 2003, 2005). Canadian Community Health Survey. Cycles 1.1, 2.1 and 3.1

<sup>&</sup>lt;sup>30</sup> Ministry of Health and Long-Term Care. Provincial Health Planning Database Model Ver.17.04, Inpatient Discharges & Health Planning System.

<sup>&</sup>lt;sup>31</sup> McKay, Alex. (2006). Trends in teen pregnancy in Canada with comparisons to U.S.A. and England/Wales. *The Canadian Journal of Human Sexuality*, Vol. 15 (3-4):157-161.

<sup>&</sup>lt;sup>32</sup> McKay, Alex. (2006). Trends in teen pregnancy in Canada with comparisons to U.S.A. and England/Wales. *The Canadian Journal of Human Sexuality*, Vol. 15 (3-4):157-161.

<sup>&</sup>lt;sup>33</sup> McKay, Alex. (2006). Trends in teen pregnancy in Canada with comparisons to U.S.A. and England/Wales. *The Canadian Journal of Human Sexuality*, Vol. 15 (3-4):157-161.

URL: http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-3456.pdf

URL: http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-4334.pdf

URL: http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-4334.pdf

<sup>&</sup>lt;sup>34</sup> Langille, Donald. (2007). Teenage pregnancy: trends, contributing factors and the physician's role. *Canadian Medical Association Journal*, 176 (11): 1601-1602.

<sup>&</sup>lt;sup>35</sup> Toronto Public Health. (2007). *Provincial Funding for InSPOT Toronto*. Board of Health report.

<sup>&</sup>lt;sup>36</sup> City of Toronto, Toronto Public Health, Sexual Health Information website. URL: http://www.toronto.ca/health/sexualhealth/index.htm

<sup>&</sup>lt;sup>37</sup> Toronto Public Health. (2005). *The Toronto Drug Strategy*. URL: http://www.toronto.ca/health/drugstrategy/

<sup>&</sup>lt;sup>38</sup> Toronto Public Health. (2007). 2007 AIDS Prevention Community Investment Program Allocations.

<sup>&</sup>lt;sup>39</sup> Toronto Public Health. (2007). 2007 AIDS Prevention Community Investment Program Allocations.