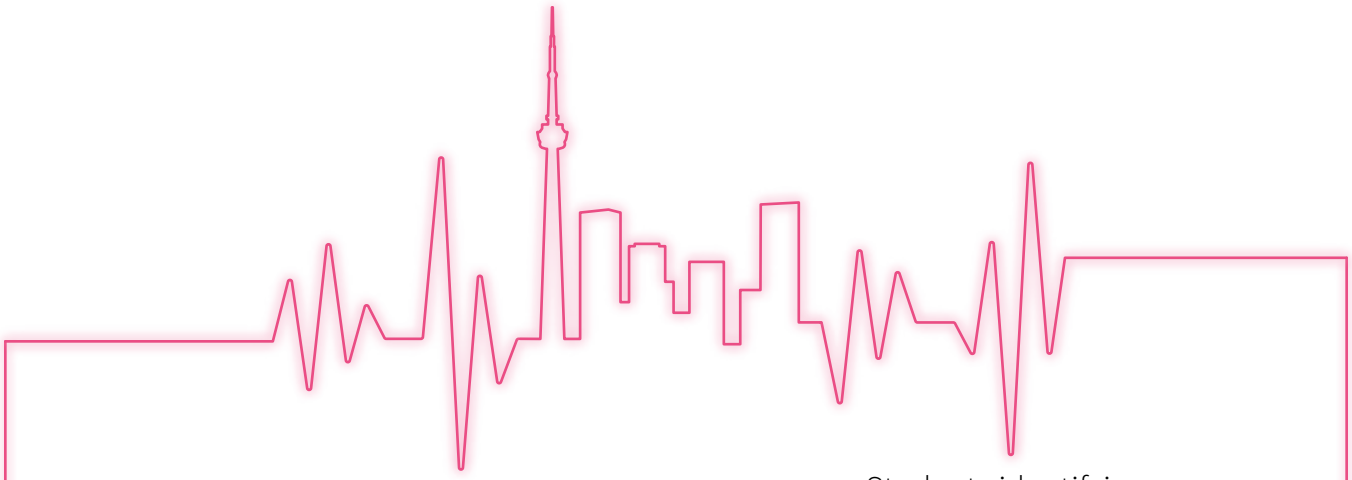
Introduction

Sexual health is defined as a state of physical, mental and social well-being in relation to sexuality [1]. Historically, indicators that have been used to track sexual health have had a biomedical focus primarily due to the fact that epidemiological measures of sexually transmitted infections (STIs), human immunodeficiency viruses (HIV) (Chapter 9) and pregnancy (Chapter 4) have been readily available. While these indicators are important to public health, sexual health promotion ideally balances the biomedical and the social dimensions of sexual health. Sexual health indicators should not only inform our understanding of observed changes in STIs, HIV, and unintended pregnancy, they should also form the basis of evidence-informed sexual health promotion programs aimed at improving sexual competence and creating healthy sexual relationships [2] [3].

A sexual competence framework is used in this chapter as it captures both the emotional and social context around sex and protective behaviours taken to prevent unwanted and/or negative physical health outcomes. Sexual competence, in the context of first intercourse, is characterized by self-perceived autonomy, self-perceived consensual sex, self-perceived acceptable timing, and contraceptive protection. This framework acknowledges that sexual competence has a direct influence on sexual behaviours and outcomes [4].

The sexual health data presented in this chapter includes sexual health behaviours, knowledge, attitudes, and resources collected through two surveys, the Canadian Community Health Survey (CCHS) for 2015/2016 and Toronto Public Health's 2014 Student Health Survey. Results from these two surveys are limited in their ability to be compared across geographies and over time. Comparisons between the two surveys are also limited, in part due to differences in terminology such as sexual orientation, sexual initiation and birth control. This chapter also includes reported STIs rates, which were calculated using data extracted from Ontario's integrated Public Health Information System (iPHIS). While this chapter describes some important sexual health indicators, it also highlights the importance of developing, validating, and routinely and systematically collecting data to provide an inclusive report of sexual health and wellness [3] [5].



1 in **5**

students are sexually active

p. 104

Students identifying as lesbian, gay, bisexual, pansexual, other or unsure are

2X

as likely to be sexually active

p. 104

3 in **5** students

use protection against STIs

p. 105

2018

STI rates overall have increased by **58%** the past 10 years

2008

p. 107

1 in **8**

adults get tested for an STI

p. 106

1 in **5**

students get tested for STIs

p. 106

Student Attitudes and Knowledge

Self-perceived ability to make informed decisions is a key component of sexual competence and the first step to positive sexual health behaviours. Age-appropriate comprehensive sexual health education can provide youth with the information and resources required for them to feel confident about making informed decisions related to their sexual health [1].

Confidence in Refusing Sexual Activity

Evidence suggests that adolescents who felt confident in refusing sex with a partner were more likely to consistently use condoms [6].

Among Toronto students in grade 9 to 12, in 2014:

- 85% reported being extremely or very confident in their ability to refuse sexual activity.
- A significantly higher proportion of females (88%) reported feeling extremely or very confident in refusing sexual activity compared to males (81%).

Confidence in Using a Barrier against Sexually Transmitted Infections

Research shows that among adolescents who were sexually active, those who felt confident using a condom were more likely to consistently use it [6].

Among Toronto students[1] in grade 9 to 12, in 2014:

- 80% reported feeling extremely or very confident in their ability to use a barrier against sexually transmitted infections (STIs).
- 84% of sexually active students reported feeling extremely or very confident in their ability to use protection. However, 61% reported using some sort of barrier at their last sexual encounter (see section on “Ever Having Sex (Students)”).
- A significantly higher proportion of students identifying as heterosexual (81%) reported feeling extremely or very confident in their ability to use protection against STIs compared to students who identified as lesbian, gay, bisexual, pansexual, other sexual orientation, or not sure (75%).

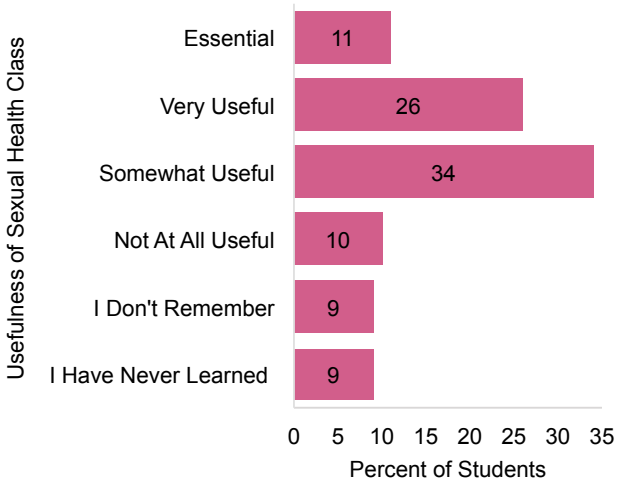
Sexual Health Education and Support

Accurate, age-appropriate knowledge and trusted guidance related to sexual health allows young people to make informed decisions about their sexual behaviour [1].

Among Toronto students in grades 7 to 12, in 2014:

- Students felt comfortable talking about sexual health most commonly with:
  - Friends (45%)
  - Parents (36%)
  - Health professionals (20%)
  - Girlfriend or boyfriend (19%)
- 28% said that they do not feel comfortable talking to anyone about their sexual health.
- 37% reported that their sexual health class was essential or very useful (Figure 8.1).

Figure 8.1: Percent of Students Rating the Usefulness of Sexual Health Class, Toronto, 2014



Source: 2014 TPH Student Health Survey

[1] Excludes students attending Catholic schools, who were not asked about sexual activity and safer sex practices

Sexual Activity

Sexual activity is not inherently negative or risky, but is rather a normal part of a person's development [7] [8]. Research shows that contemporary Canadian youth are becoming sexually active at younger ages than in previous generations. Additionally, the gender difference between young males and females in age at sexual initiation has almost disappeared [9].

Age at Sexual Initiation

Knowing the age at which people become sexually active is useful for identifying the best time to provide age-appropriate sexual health education and services [1] [4]. These can have a direct influence on sexual decision-making and sexual competence.

Among Toronto adults (18 to 64 years of age[2]), in 2015/2016:

- The average age at sexual initiation was 19 years, but differed by age group. The youngest age group (18 to 24 years of age) had a significantly younger average age of sexual initiation (17 years) compared to older age groups.
- Those self-identifying as homosexual[3] or bisexual had an earlier sexual initiation than 18 years of age.

Ever Having Sex (Students)

Among Toronto students[4] in grade 9 to 12, in 2014:

- 20% of students in grade 9 to 12 reported ever having sex, ranging from 10% in grades 9/10 to 28% in grades 11/12.
- A significantly higher proportion of male students (23%) reported ever having sex compared to female students (17%).
- Students identifying as lesbian, gay, bisexual, pansexual, other sexual orientation, or not sure, were almost twice as likely to indicate having had sex (37%) compared to students who identified as heterosexual (19%).

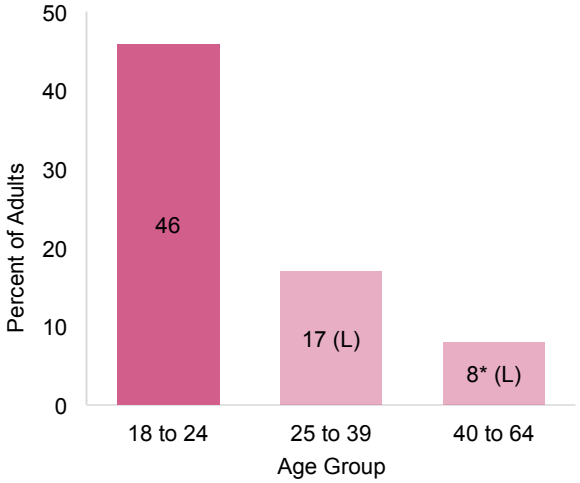
Sexual Partners

The number of sexual partners is associated with sexually transmitted infections (STIs) and their associated health risks if barrier methods are not used. It can impact the need for STI testing and age-appropriate sexual health promotion programming.

Among Toronto adults (18 to 64 years of age[5]), in 2015/2016:

- Compared to the youngest age group (18 to 24 years of age), the frequency of having more than one sexual partner in the past year was significantly lower in older age groups (Figure 8.2).
- 87% of heterosexual adults had one sexual partner in the past year. This compares to 50% for individuals who self-identified as homosexual[6] or bisexual.

Figure 8.2: Percent of Adults Having More Than One Sexual Partner in the Past Year by Age Group, Toronto, 2015/2016



L: Significantly lower than the youngest age group.
* High degree of variability. Interpret with caution.
Source: Canadian Community Health Survey 2015/2016

[2] Individuals 65 years old and over were not administered the sexual health module of the CCHS.
[3] These terms were used by the survey tool that collected these data, and do not reflect the terminology used by Toronto Public Health
[4] Excludes students attending Catholic schools, who were not asked about sexual activity and safer sex practices.
[5] Individuals 65 years old and over were not administered the sexual health module of the CCHS.
[6] These terms were used by the survey tool that collected these data, and do not reflect the terminology used by Toronto Public Health

Among Toronto students[7] in grade 9 to 12, in 2014:

- 35% of those who reported being sexually active had two or more partners in the past year, ranging from 29% in grades 9/10 to 37% in grades 11/12
- 35% of students with two or more partners visited a sexual health clinic for testing. This compares to 10% of students with one partner.
- Among students who ever had sex, 45% of lesbian, gay, bisexual, pansexual, other sexual orientation, or unsure students had two or more sexual partners in the past year. This compares to 34% of heterosexual students.

Protection

There are many ways to have safer sex and decrease the risk of sexually transmitted infections (STIs), human immunodeficiency virus (HIV), and unplanned pregnancies. While prevention is desirable, early detection is also important since it can also help prevent the spread of STIs and HIV, and lead to earlier treatment.

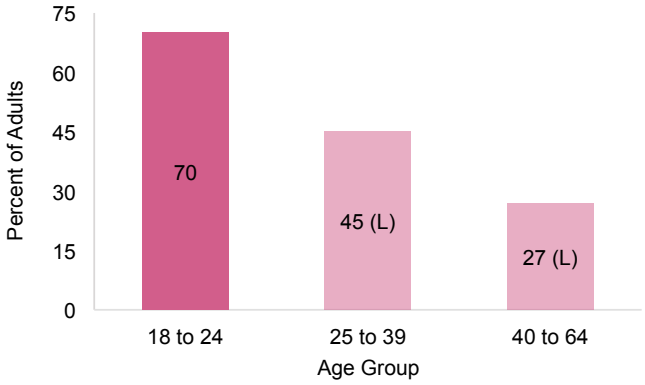
Condom Use

Condoms, when used correctly, are an effective means of protection against STIs and HIV, and can be an important part of preventing unplanned pregnancies [10]. Consistent condom or barrier use during sexual activity is therefore an important sexual health tool for individuals wishing to increase their sexual safety. It also underlines the importance of ensuring condoms are available to those who need them [11].

Among Toronto adults (18 to 64 years of age[8]), in 2015/2016:

- 38% used a condom during their last sexual encounter.
- The youngest age group (18 to 24 years of age) was more likely to use condoms during their last sexual encounter compared to older age groups (Figure 8.3).

Figure 8.3: Percent of Adults Who Used a Condom During Their Last Sexual Encounter by Age Group, Toronto, 2015/2016



L: Significantly lower than the youngest age group
Source: Canadian Community Health Survey 2015/2016

Among Toronto students[9] in grade 9 to 12, in 2014:

- 61% of those who were sexually active reported using some sort of barrier at their last sexual encounter.
- A significantly higher proportion of students in grades 9 and 10 (74%) reported using a barrier at their last sexual encounter compared to students in grades 11 and 12 (58%).
- The proportion of males indicating using a barrier at their last sexual encounter was significantly higher (67%) compared to females (57%).
- 64% of students who identified as heterosexual indicated using a barrier at their last sexual encounter. This compares to 47% of students who identified as lesbian, gay, bisexual, pansexual, other sexual orientation, or not sure.

[7] Excludes students attending Catholic schools, who were not asked about sexual activity and safer sex practices.
[8] Individuals 65 years old and over were not administered the sexual health module of the CCHS.
[9] Excludes students attending Catholic schools, who were not asked about sexual activity and safer sex practices.

Birth Control Use

Birth control refers to the tools and procedures used to avoid pregnancy and control fertility.

- Among Toronto adults 18 to 49 years of age[10] in 2015/2016 who did not use a condom at their last sexual intercourse, the most common method of birth control were the birth control pill (20%), withdrawal/pulling out (8%)[11] and vasectomy/tubal sterilization (9%)[12]. 55% reported using no method of protection.

HIV Testing

Knowledge of HIV status is recommended for all sexually active people and can only be achieved through HIV testing. Individuals at higher risk of acquiring HIV infection should get tested more often. [13]

Among Toronto adults (18 to 64 years of age[13]), in 2015/2016:

- 12% were tested for HIV.
- 17% of younger adults (18 to 39 years of age) were tested for HIV in the past year. This compares to 6% of adults 40 to 64 years of age.
- Men who have sex with men (MSM)[14] were over five times more likely (56%[15]) to have been tested for HIV in the past year. This compared to 10% of the rest of the sexually active population.

More information on HIV is included in Chapter 9.

Sexually Transmitted Infection Testing

Most people with STIs have no symptoms, though some may experience pain or discomfort. Sexually active people not using condoms consistently, or at all, can reduce risk for both themselves and their partners by testing more frequently. This allows infections to be identified early and treated as soon as possible [12].

Among Toronto adults (18 to 64 years of age[16]), in 2015/2016:

- 12% were tested for an STI other than HIV.
- Men who have sex with men (MSM)[17] were more than four times more likely (47%[18]) to be tested for an STI other than HIV, compared to 11% for the rest of the sexually active population.
- 29%[19] of younger adults (18 to 24 years of age) were tested for STIs other than HIV. This compares to 17% of 25 to 39 year-olds and 6%[20] of 40 to 64 year-olds.

Among Toronto students[21] in grades 9 to 12, in 2014:

- 19% of those sexually active reported having been to a doctor or a clinic for STI testing.
- Females (28%) reported undergoing STI testing at a rate that was more than double that for males (12%).
- 34% of students who identified as lesbian, gay, bisexual, pansexual, other, or not sure, reported undergoing STI testing. This compares to 17% of students who identified as heterosexual.

[10] Reproductive age for women is defined as 15 to 49. There is no similar standard for men. For the purposes of this analysis, all adults between the ages of 18 and 49 were included.
[11] High degree of variability. Interpret with caution.
[12] High degree of variability. Interpret with caution.
[13] Individuals 65 years old and over were not administered the sexual health module of the CCHS.
[14] Men who indicated having sex with males only or both males and females.
[15] High degree of variability. Interpret with caution.
[16] Individuals 65 years old and over were not administered the sexual health module of the CCHS.
[17] Men who indicated having sex with males only or both males and females.
[18] High degree of variability. Interpret with caution.
[19] High degree of variability. Interpret with caution.
[20] High degree of variability. Interpret with caution.
[21] Excludes students attending Catholic schools, who were not asked about sexual activity and safer sex practices.

Reported Sexually Transmitted Infections

The high and increasing number of reported STIs in Toronto, underscores the importance of education and counselling regarding risk reduction strategies, and monitoring for treatment compliance to reduce transmission. The asymptomatic nature of many of these diseases means that many cases remain undiagnosed and are not reported to public health and the true burden is not fully understood.

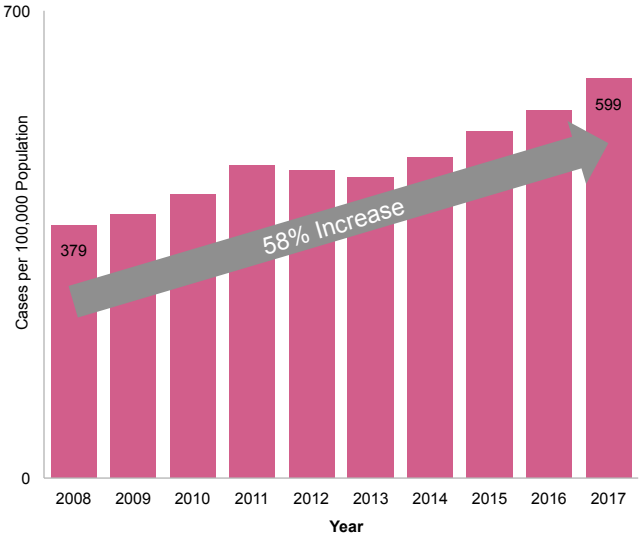
STI Overview

In Toronto:

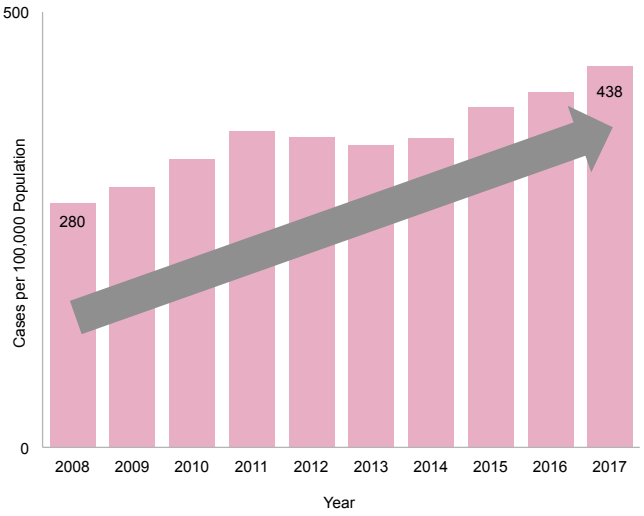
- STIs were the most commonly reported type of infectious disease with 17,769 cases in 2017.
- The combined incidence rate for all reportable STIs increased by 58% over the ten-year period beginning in 2008 (Figure 8.4). Rates also increased in Ontario over the same time period, mirroring trends in other Canadian and international jurisdictions [17].
- These observed increases were driven by a number of factors, including changes in screening practices, more sensitive diagnostic testing, as well as true increase in cases. Most concerning are reports that local and global trends indicate a decline in safer-sex practices [17] [18].

Figure 8.4. Sexually Transmitted Infections (Incidence Rates), Overall and by Type, Toronto, 2008 to 2017*

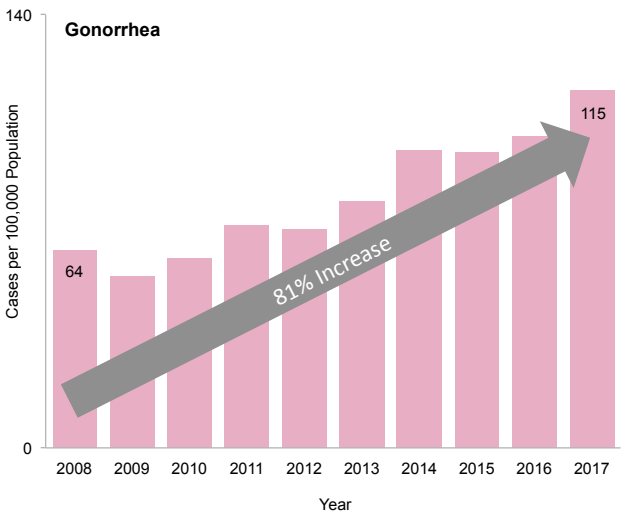
All Sexually Transmitted Infections, Combined



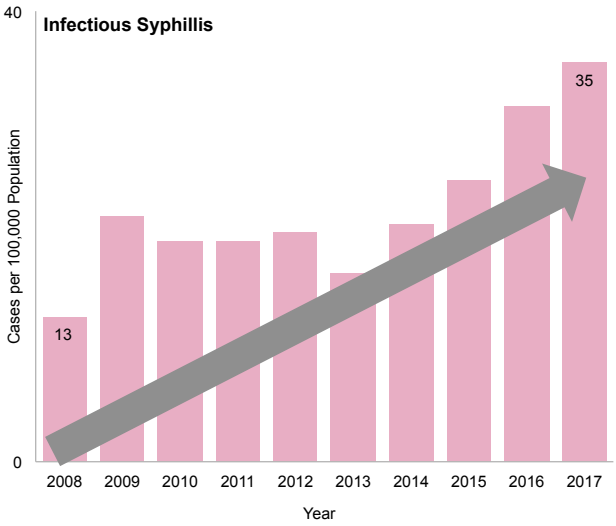
Chlamydia



Gonorrhea



Infectious Syphillis



* Note: Y axis scales are different on each chart.
Data Source: iPHIS (Data extracted: June 2018)

STIs in Adolescents and Young Adults

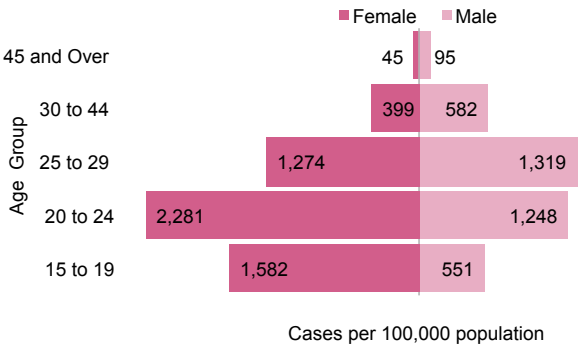
Compared with older adults, sexually active adolescents and young adults are at a higher risk of acquiring an STI as a result of behavioural, biological and cultural reasons [18]. These factors can include: barriers to accessing STI prevention and treatment options, peer behaviours, and sexual risk-taking behaviours.

Among young women, early stages of infection with chlamydia and gonorrhea are often asymptomatic and go untreated, potentially leading to significant long term health impacts. Approximately 40% of untreated chlamydia and gonorrhea cases can progress to pelvic inflammatory disease which can result in chronic pain and damage to the fallopian tubes. This increases the risk of ectopic pregnancy and infertility [19].

In Toronto, in 2017:

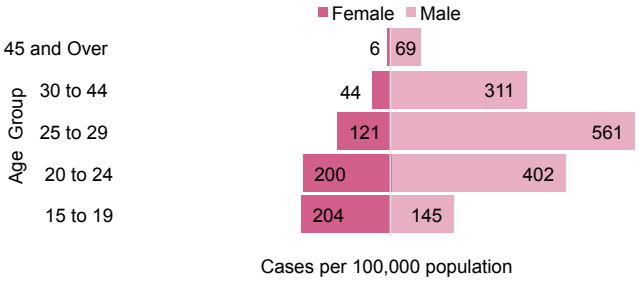
- The highest rates of chlamydia and gonorrhea were reported among those aged 15 to 29 years old, comprising 52% and 67% of reported cases, respectively (Figures 8.5 and 8.6).
- Young women represented the majority of detected chlamydia cases with the rate among females 15 to 24 years approximately double that of males in the same age group.
- Lower reported rates among males were largely believed to reflect less screening compared to women and not a true representation of the incidence of disease.

Figure 8.5: Chlamydia (Incidence Rate), by Age Group and Sex, Toronto, 2017



Data Source: iPHIS (Data extracted: June 2018)

Figure 8.6: Gonorrhea (Incidence Rate), by Age Group and Sex, Toronto, 2017



Data Source: iPHIS (Data extracted: June 2018)

STIs in Men

The incidence of many STIs, including gonorrhea and syphilis, is higher among men who have had sex with men (MSM). These include men who identify as gay or bisexual, and/or men who report sexual contact with other males.

In Toronto, in 2017:

- 79% of gonorrhea cases were male. Of those reporting a risk factor, 63% reported sexual contact with the same sex.
- 97% of infectious syphilis cases were male. Of those reporting a risk factor, 84% reported sexual contact with the same sex.
- Approximately 41% of Toronto's infectious syphilis cases were co-infected with HIV (2013-2017 data).

DATA GAP

Local level data that create a broader understanding of sexual health are needed. Sexual health indicators are needed in the areas of physical, mental, emotional, and social well-being as it relates to sexuality; responsible approaches to sexuality, sexual relationships, and sexual experiences including discrimination, coercion and violence [5]. Other areas include substance use and mental health as they relate to sexuality [16] [17], mutual consent to sexual activity and awareness of sexual health-related legislation (e.g. legislation related to sexting) and medical technologies (e.g. Pre-Exposure Prophylaxis), as well the ability to access them [1].

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