

What are the most common sexually transmitted infections affecting youth?

There are many different sexually transmitted infections (STIs). Some are caused by viruses and some by bacteria. The viral STIs include: human papillomavirus (HPV), genital herpes (HSV-2), Hepatitis B (HBV) and human immunodeficiency virus (HIV). The bacterial STIs include chlamydia, gonorrhea, syphilis, and trichomoniasis. To know, for sure, how common these individual STIs are among teen and young adult females and males, we would need to test for each STI in a sample that was large enough and varied enough to ensure that the findings accurately reflected these populations of young people as a whole. So far we don't have large studies of that kind in Canada.

Fortunately, we can piece together information from different kinds of sources to provide a general picture of the most common STIs among youth. Those sources include:

- 1 data on reported STI rates derived from positive test reports that doctors make to public health authorities (although these rates do not tell us the percentage infected);
- **2** results of small scale studies that measured the prevalence of different STIs in specific groups (prevalence is the percentage of people infected);
- 3 results of large scale STI prevalence studies from the United States; and
- 4 current medical knowledge about how different STIs spread in the population, how infectious they are, and how long the infection stays in the body.

So what do we know about how common STIs are in youth?

A 2003-2004 study of 838 American female adolescents aged 14-19 (some of whom had never had sexual intercourse) found that 26% of the total sample had at least one of the STIs being tested for. When only those who had ever had intercourse were included in the calculation, that figure was 40%! Looking again at the total sample, 18.3% had HPV, 3.9% had chlamydia, 2.5% had trichomoniasis and 1.9% had genital herpes (HSV-2). The top two were HPV and chlamydia. Would findings in Canada be similar?

There is some evidence that the prevalence of STIs among Canadian teens may be lower than in the U.S. So we can cautiously assume that a similar study in Canada might show a slightly lower percentage of young people infected. However, it is quite clear that HPV and chlamydia are the two most common STIs among Canadian youth and that many sexually active teens and young adults in Canada are infected with one or both of these STIs.

Human papillomavirus (HPV) is the most common STI in the world

HPV is by far the most common STI in Canada and around the world. In fact, scientists believe that up to 75% of people become infected with HPV at some point in their lives. This STI is particularly common during adolescence and young adulthood. Studies of young women attending university have found that up to 25% had HPV.

This virus is spread primarily through genital to genital contact. In most cases, the person who has HPV does not know it. That is because most people have no symptoms at all. Most people with HPV infection will clear the virus within 6 months to 3 years. However, for some people, the virus may persist for longer periods of time and can lead to serious health consequences.



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There are approximately 40 different types of HPV, two of them (type 6 and type 11) cause genital warts. Genital warts are common in the young adult population and can be removed by medical treatment. In some cases they may keep coming back until the person's body eventually clears the virus. Also, there are several other HPV types (e.g., type 16 and type 18) that can cause changes to the cells of a woman's cervix. In rare cases, these changes, if not detected and treated, can lead to cervical cancer. This is why it is important for sexually active women to talk to their doctors about a Pap test. This test can provide early detection of changes to the cervix which allows for timely and effective treatment. The vaccine that has been developed and is currently available is meant to protect against these HPV types (6, 11, 16, 18) and is most effective if given to girls before they become sexually active.

Chlamydia can cause problems but is easily cured when detected

Chlamydia is by a wide margin the most common bacterial STI among Canadian young people. We don't know exact numbers but it's likely that up to 5% or more of young women in their late teens and early 20's are infected with chlamydia.

More than half of chlamydia infections are asymptomatic, meaning that the person has no signs or symptoms. Because it is very often asymptomatic, many people with chlamydia don't know they have it. If it is undiagnosed and untreated, chlamydia can have significant health consequences, especially for women. Untreated chlamydia can cause pelvic inflammatory disease (infection of the uterus, fallopian tubes and other reproductive organs), tubal infertility (one of the major causes of infertility among Canadians), chronic pelvic pain, and ectopic pregnancy.

Fortunately, it's easy to get tested for chlamydia at a doctor's office or clinic and chlamydia can be cured with a single dose of antibiotics.

You can protect yourself against sexually transmitted infections

We have only discussed the two most common STIs among youth but there are a number of others (as noted above). In short, STIs are very common among youth and it is important to think seriously about ways to lower your risk of STIs and to avoid their potential health consequences. There are three basic ways that you can lower your risk of getting an STI.

- 1 If you are sexually active, you can significantly lower your risk of STI by using condoms, especially for penis-vagina, and penis-anus intercourse (oral sex can transmit STI but the risk of transmission is lower). For condoms to be effective it is very important that you use them properly and that you use them every time you have sex (See the link below for more information on the effectiveness of condoms in preventing HIV/STI).
- 2 If you are sexually active, it is also important to maintain good sexual and reproductive health care. This includes talking with your doctor at your annual check up about STI tests. An HIV test can be done as part of an annual blood test. A quick swab or a urine sample is all that is needed for a chlamydia test. If you are a sexually active female you should talk to your doctor about having a Pap test. If you don't have a doctor, you can get these tests at a walk-in medical clinic.
- **3** Some teens do not become sexually active (penis-vagina intercourse, penis-anal intercourse, oral sex) until they are in their late teens or their 20s. Not engaging in the kinds of sexual activity that have a high risk for STI until they are older is one way that young people can reduce their risk.



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What's the bottom line on STIs?

Sexually transmitted infections are a lot more common than many people think. As we have seen here, HPV and chlamydia are the two most common STIs among young people. Some are surprised to find out that for most cases of STI there are no signs or symptoms. Not knowing that you have an STI means less chance of being treated and more chance of having the sometimes serious health consequences of an untreated STI. It also means that you can unknowingly pass a STI to a sexual partner. So, the bottom line on STIs is to get educated, make your own personal plan for how you are going to avoid STI, and get tested if you are sexually active. Taking steps to avoid STI is one of the most important things you can do to protect your sexual and reproductive health.

Links

Human papillomavirus (HPV) www.hpvinfo.ca

Chlamydia www.sexualityandu.ca/teens/sti-1-2.aspx

The effectiveness of condoms in preventing HIV/STI www.sieccan.org/pdf/mckay_cjhs2007_condom%20effectiveness.pdf

