

Sexually Transmitted & Blood-borne Infection Tool Kit for LTCH/RH/CLS RVH IPAC Hub

Ashley Allan RN, BScN, CIC - April 2023



WHAT ARE SEXUALLY TRANSMITTED & BLOOD-BORNE INFECTIONS?

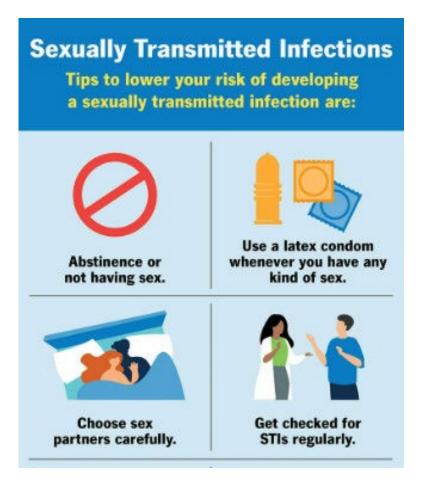
Sexually transmitted infections (STI) are infections (bacterial/viral) that you can get through having sexual and/or intimate skin-to-skin contact

with someone who has a STI.

Common STI:

- Chlamydia
- Gonorrhea
- Syphilis
- Human immunodeficiency virus (HIV)
- Genital Herpes
- Hepatitis B
- Human papillomavirus (HPV)





CHLAMYDIA

What is Chlamydia?

Chlamydia is a STI that is very common. Most people who have chlamydia don't have any signs or symptoms. But if it's left untreated, chlamydia can cause serious health problems, including infertility, pelvic inflammatory disease and chronic pelvic pain. It can also increase the risk of ectopic pregnancy.

Chlamydia Transmission

Chlamydia is spread through sexual contact with someone who has the infection.

Symptoms:

Most people do not have any signs or symptoms of chlamydia. If symptoms do occur, they may include:

- Females: A change or an increase in discharge from the vagina, vaginal itching bleeding between periods, pain or bleeding during or after vaginal sex, pain in the lower abdomen and/or burning sensation while urinating
- Males: Burning sensation while urinating, discharge from the penis, burning or itching around the opening of the penis and/or pain in the testicles



CHLAMYDIA (CONT.)

How is it Treated?

Chlamydia can be treated with antibiotics. If you're prescribed antibiotics, it's important that you take your medication as prescribed, even after you start to feel better. Even if you're treated for this infection, you can get it again if you have sex with someone who has the infection and hasn't been treated or hasn't finished treatment.

True or False

According to Public Health Agency of Canada (PHAC), Chlamydia rates have increased by 33.1% over the past decade





GONORRHEA

What is Gonorrhea?

Gonorrhea is a bacterial infection. Gonorrhea is on the rise in Canada and around the world and is becoming increasingly resistant to antibiotics. This means that, one day, current antibiotics may not work to treat this infection. If left untreated, gonorrhea can cause serious health problems, including infertility, pelvic inflammatory disease, chronic pelvic pain, an increased risk of ectopic pregnancy, and pain in the testicles.

Gonorrhea Transmission

Gonorrhea is spread through sexual contact with someone who has the infection.

Symptoms:

People with gonorrhea may not have symptoms. If symptoms do occur, they may include:

- Females: A change or an increase in discharge from the vagina, bleeding between periods, pain or bleeding during or after vaginal sex, pain in the lower abdomen and/or burning sensation while urinating
- Males: Burning sensation while urinating, discharge from the penis, burning or itching around the opening of the penis and/or pain in the testicles



GONORRHEA (CONT.)

How is it Treated?

It's becoming more and more difficult to treat gonorrhea with existing antibiotics. It's important that you take your medication as prescribed even if you start to feel better. If you've finished your treatment for gonorrhea and still have symptoms, you should go back to your health care provider as soon as possible because you may need additional treatment. Many people who have gonorrhea also have chlamydia and are treated for both infections at the same time.

True or False

According to Public Health Agency of Canada (PHAC), Gonorrhea rates have almost tripled (181.7% increase) over the past decade.





SYPHILIS

What is Syphilis?

Syphilis is a bacterial infection that's on the rise in Canada. If undetected, during the first 2 years of infection, you can pass on syphilis, even if you don't have any symptoms. After these 2 years, you will still have the infection, but you can't pass it on. If syphilis is left untreated, it can cause serious health problems, including damage to the brain, heart and other organs in the body, which can become permanent.

Syphilis Transmission

Syphilis is spread through sexual contact with someone who has the infection.

Symptoms:

People with syphilis may not have symptoms. If symptoms do occur, they may include:

- An open sore that doesn't hurt, called a chancre, on the genitals, anus or throat. The sore will go away even if it's not treated, but you will still have syphilis.
- A body rash and/or feeling like you have the flu. These symptoms will also go away even if they're not treated.
- Swollen glands (lymph nodes), including behind the ears, under the jaw, in the armpits and in the groin. The swelling may feel like small bumps underneath the skin.
- In elderly patients, syphilis can also manifest as cognitive decline and/or neurological deficits.



SYPHILIS (CONT.)

How is it Treated?

Syphilis can be treated with antibiotics. Once you've been treated for syphilis, you will need to go for follow-up blood tests to make sure the infection is gone. It's important that you attend all of the scheduled visits.

LTC/RH/CLS Consideration:

Syphilis screening is sometimes needed for residents in LTC and RH as part of a cognitive work-up or neurological assessment. Often times when Syphilis is detected, residents are no longer infectious (as syphilis can be asymptomatic) and they may be dealing with health implications as a result of Syphilis being left untreated (i.e. neurosyphilis).

True or False

Syphilis rates increased almost five-fold (393.1% increase) between 2010 and 2019, the highest increase in rates of all three bacterial STI under surveillance.





HUMAN IMMUNODEFICIENCY VIRUS (HIV)

What is HIV?

Human immunodeficiency virus (HIV) is a virus that attacks the body's immune system. HIV may lead to acquired immune deficiency syndrome (AIDS) if it's left untreated.

HIV Transmission

HIV is spread through sexual contact with someone who has the infection, coming in contact with infected blood or blood products and/or by sharing needles/drug equipment with those who are infected with HIV. HIV can't be passed on through hugging, kissing or casual contact like shaking hands or giving someone a high-five or pat on the back.

Symptoms:

Some people have no symptoms for years, whereas other people may develop mild flu-like symptoms 2 to 4 weeks after contracting HIV. Common early symptoms can include: Fever, sore throat, headache, muscle aches and joint pain and/or swollen glands (lymph nodes).



HUMAN IMMUNODEFICIENCY VIRUS (HIV) (CONT.)

How is it Treated?

There currently is no cure for HIV, but it can be managed with antiretroviral medications and medical supervision. Antiretroviral medications help lower the amount of virus in your body, keeping your immune system healthy and helping you fight off other infections.

People living with HIV who are on treatment and have an ongoing undetectable viral load have effectively no risk of:

Transmitting HIV to their sexual partners and/or transmitting HIV to their baby during pregnancy/delivery

If you are Diagnosed with HIV

You must notify your sexual partner(s) so that they can be tested and treated. If you're uncomfortable notifying your partner(s), ask your health care provider or local public health unit for assistance.

Did you know?

Ontario has a law that enables police officers, firefighters, correctional services staff, paramedics and others who in the course of their work may be exposed to the blood or body fluid of others, to apply to request information about the source person's blood with respect to Hepatitis B, C and HIV (The Mandatory Blood Testing Act, 2006).

More information can be found here:

Sexual Health (simcoemuskokahealth.org)



GENITAL HERPES

What is Genital Herpes?

Genital herpes is an infection caused by the herpes simplex virus (HSV). HSV was originally thought to be oral (HSV 1) and genital (HSV 2) but, HSV type 1 and 2 are both known to cause genital herpes.

Genital Herpes Transmission

Genital herpes is generally spread through sexual contact with someone who has the infection, whether the person has sores or not. You can spread herpes to other parts of your or your partner's body by touching the sores or fluids from the sores and then touching elsewhere, for example, your eyes, mouth or genitals.

Symptoms:

Many people who have herpes won't have symptoms and may not know they have it. When you first have an outbreak of herpes, there may be itchiness along with painful sores and blisters. The sores usually go away on their own, but you will still have the virus. Herpes symptoms may also include painful swollen glands in the groin and flu-like symptoms. These symptoms may last several weeks. Herpes can keep coming back. These are called recurrences. There's no way to predict if or how often recurrences will happen.

How is it Treated?

Genital herpes can be managed with antiviral medication. Antivirals can help to prevent recurrences or reduce how long the recurrence lasts.



HEPATITIS B

What is Hepatitis B?

Hepatitis B is a virus that can infect the liver and sometimes leads to severe liver damage or cancer of the liver.

Hepatitis B Transmission

Hepatitis B is spread through sexual contact with someone who has the infection. It can also be spread through sharing contaminated druguse equipment (e.g., needles); tattooing, body piercing, unsterilized medical equipment, and through blood or blood products. While less common, it can also be spread by sharing personal care items like a razor, nail clippers or a toothbrush with a person who has the infection.

Symptoms:

You may not have any signs or symptoms, so you can pass the virus on without knowing that you have it. If you do have symptoms, they may include: Tiredness, abdominal pain, dark urine and/or pale stools, lack of appetite, nausea and/or yellowing of the skin and/or the whites of the eyes (jaundice).

How is it Treated?

In most people, the virus will go away on its own within 6 months, but it can be passed on to others during this time. Once your body fights off the infection, you're protected from ever getting the virus again and can't pass it on to others (immunity). There are some cases where other treatments like antivirals may be recommended. Some people won't respond to treatment and will have hepatitis B for life. As long as they have the virus, they can pass it onto others.

Hepatitis B Vaccine:

Hepatitis B vaccine is 95-100% effective pre-exposure to Hepatitis B.



HUMAN PAPILLOMAVIRUS (HPV)

What is HPV?

HPV is short for human papillomavirus. There are about 200 types of HPV that can infect different parts of the body. Some types of HPV can cause: Warts on the penis, scrotum and thighs, warts on the inside or outside the vagina, anus or throat, cell changes that can lead to cervical, oral or anal cancers. You can also have more than one type of HPV at a time.

HPV Transmission

You can get HPV through sexual contact with someone who has the infection. You can also get HPV from other sexual activity involving intimate skin-to-skin contact.

Symptoms:

Most people don't have symptoms, making HPV hard to detect. Depending on the type of HPV you have, you may get warts on your genitals or anus, which may look like bumps that can be cauliflower-like. Sometimes, HPV doesn't cause visible warts, but rather abnormalities on Pap tests (collecting cells from the cervix and examining under a microscope to make sure the cells are healthy).

How is it Treated?

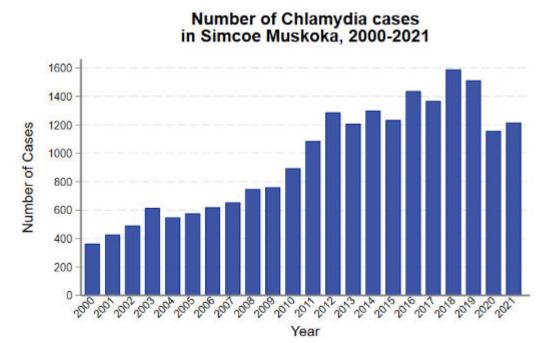
HPV can't be cured, but oral or genital warts caused by HPV will often go away without treatment. Treatment doesn't prevent re-infection or recurrence of HPV. You can still get another HPV infection in the future.

HPV Vaccine

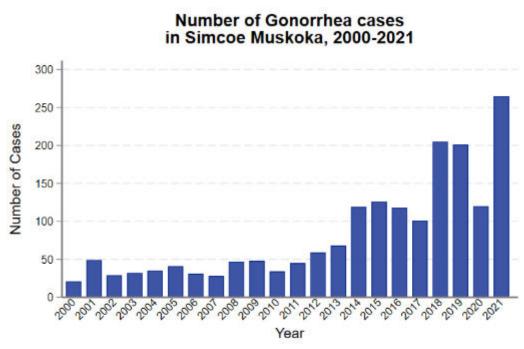
Ontario students in grade 7 can get the HPV vaccine for free though the school vaccination program. Ideally, you should get the vaccine before becoming sexually active and exposed to HPV but the vaccine can also protect against future HPV infections if you are sexually active. The HPV vaccine is also available outside of the school program (at a cost).



STI BURDEN IN SIMCOE MUSKOKA REGION



Data Source: Integrated Public Health Information System (iPHIS) [2000-2021]. Ontario Ministry of Health, extracted 26 Jul 2022 Note: Includes confirmed cases. Case definition updated in 2009 and 2014.

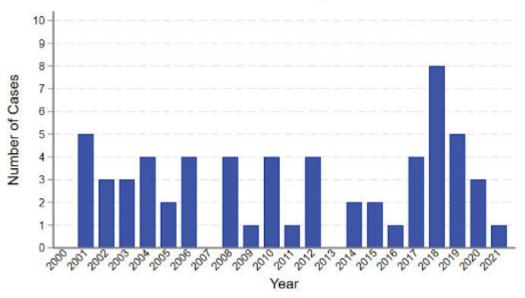


Data Source: Integrated Public Health Information System (iPHIS) [2000-2021]. Ontario Ministry of Health, extracted 26 Jul 2022 Note: Includes confirmed cases. Case definition updated in 2009 and 2014.



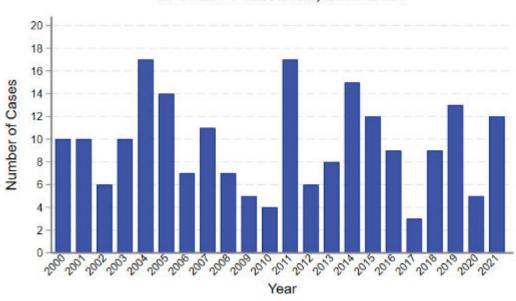
STI BURDEN IN SIMCOE MUSKOKA REGION

Number of Acute Hepatitis B cases in Simcoe Muskoka, 2000-2021



Data Source: Integrated Public Health Information System (iPHIS) (2000-2021). Ontario Ministry of Health, extracted 26 Jul 2022 Note: Includes confirmed cases. Case definition updated in 2009, 2012 and 2014.

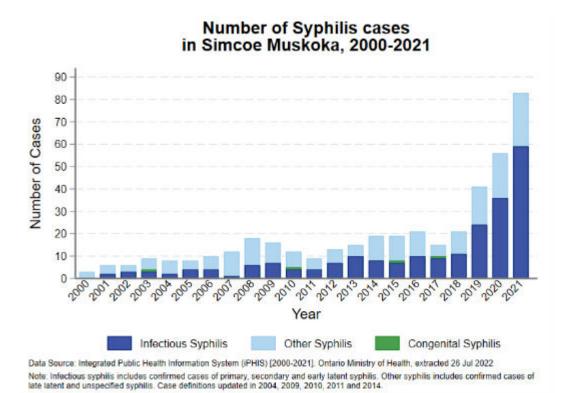
Number of HIV cases in Simcoe Muskoka, 2000-2021



Data Source: Integrated Public Health Information System (iPHIS) [2000-2021]. Ontario Ministry of Health, extracted 26 Jul 2022 Note: Includes confirmed cases. Case definition updated in 2009 and 2014. HIV = Human Immunodeficiency Virus



STI BURDEN IN SIMCOE MUSKOKA REGION/CANADA



Proportion of STI cases per age group (2019) Canada Statistics

Age (years)	Chlamydia	Gonorrhea	Infectious Syphilis
15-24	53.9%	28.8%	19.1%
25-29	20.2%	22.2%	20.2%
30-39	17.1%	29.4%	31.6%
40+	8.1%	18.8%	29.0%



WHAT ARE THE RISK FACTORS FOR STI

- Multiple partners (concurrently or over time)
- Anonymous or casual sexual partners
- Sex without the use of barrier protection (i.e. condoms)
- Sex with person(s) with an STI
- Previous STI
- Substance use (drug, alcohol or both)
- Sharing drug equipment (needles etc.)
- History of intimate partner or sexual violence
- Social environments





IPAC CONSIDERATIONS

- Although Additional Precautions are not indicated when providing care to residents/clients with a STI, adherence to Routine Practices are required
- Hand Hygiene with soap and water if blood/body fluid risk/exposure
- Education on the health implications of STI/BBI and high risk behaviours (social stigma associated with STI/BBI and testing compliance)
- Education about the signs and symptoms of STI/BBI and the asymptomatic nature of many infections
- Education and access harm reduction strategies (clean needles, condoms)



PERSONAL PROTECTIVE EQUIPMENT (PPE)

When providing direct care to residents or indirect care (i.e. cleaning and disinfection)

- Use good routine practices at all times
- Point-of-care risk assessment, hand hygiene
- Safe handling of soiled linen and safe disposal of sharps
- Use appropriate PPE for blood/body fluid risk or exposure (gloves, fluid resistant gown, eye/face protection)
- Get vaccinated if at risk and not yet immunized (Hep B).





CLEANING AND DISINFECTION

• 1:10 dilution of household bleach can be used for disinfecting blood spills and dried blood **after** the surface is cleaned. Recommended contact time is 10 minutes.



 Accelerated hydrogen peroxide (AHP) one-step cleaning and disinfectant wipes (0.5%) with general contact time of 1 minute.



 Quats (quaternary ammonium compounds) wipes can kill with a contact time of usually 4-5 minutes depending on the product used.





SURVEILLANCE AND REPORTING

Diseases of Public Health Significance

Reporting of Diseases of Public Health Significance is mandated and essential for their control. If you suspect or have confirmation of the following Diseases or their etiologic agents, (as per Ontario Regulation 135/18 and amendments under the Health Protection and Promotion Act, R.S.O. c.H.7) please report them to the local Medical Officer of Health.

Click here to find a list of reportable diseases/organisms

□ Infectious Diseases (simcoemuskokahealth.org)

* Genital herpes and HPV are not reportable



REFERENCES

- 1. Government of Canada. Sexually Transmitted and Blood Borne Infections (STBBI) prevention guide. Available at: Sexually Transmitted and Blood Borne Infections (STBBI) prevention guide Canada.ca. Accessed April 12, 2023.
- 2. Simcoe Muskoka District Health Unit (SMDHU). Infectious Diseases. Available at: <u>Infectious Diseases</u> (<u>simcoemuskokahealth.org</u>). Accessed April 17, 2023.
- 3. Simcoe Muskoka District Health Unit (SMDHU). Sexual Health. Available at: <u>Sexual Health</u> (<u>simcoemuskokahealth.org</u>). Accessed April 5, 2023.
- 4. Government of Canada. Report on Sexually Transmitted Infection Surveillance in Canada 2019. Available at: Report on sexually transmitted infection surveillance in Canada, 2019 Canada.ca. Accessed April 12, 2023.
- 5. Simcoe Muskoka District Health Unit (SMDHU). Diseases of Public Health Significance. Available at: <u>Disease of Public Health Significance (simcoemuskokahealth.org)</u>. Accessed April 24, 2023.
- 6. Need 2 Know. 7 Most Common STIs you Should Know About. Available at: 7 most common STIs you should know about Need 2 Know (2knowdiagnostics.com). Accessed April 20, 2023.



QUESTIONS

Please contact your RVH IPAC Hub liaison.

Lauren Parsons

email: parsonsl@rvh.on.ca

Ashley Allan

email: allana@rvh.on.ca

Mustansir Diwan

email: diwanm@rvh.on.ca

Jessie Must

email: mustj@rvh.on.ca

