

# Understanding Sexually Transmitted Infections Comparative Chart

Use this comparative chart to help you understand and identify the different types of STIs and how you can protect yourself from them.

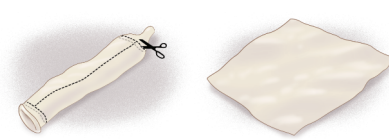
**Sexually transmitted infections, or “STIs”** for short, are viral, bacterial, parasitic or fungal infections that are contracted from person to person during sexual activity. Infections can be transferred through exchanges of body fluids like blood, semen, vaginal secretions and breast milk. Different types of sexual activities that transfer infections include oral, vaginal or anal intercourse, as well as skin-to-skin contact.

**Protect yourself from STIs.** It is important to use a latex condom for any sexual activity and to use a dental dam for oral sex. If you have sexual relations with multiple partners, make sure you always use a condom and get tested regularly.

**It’s never too late to take action.** If you have tested positive for an STI, make sure you seek treatment from your health-care professional as soon as possible. You will also be asked to contact all the partners you have been sexually active with, to avoid spreading the infection. It is important to treat STIs right away, as many are easily curable, but may cause infertility or even death if left untreated. Pregnant and lactating women with STIs may require different forms of treatment to prevent harm to their fetuses or newborns.

**Dual protection** consists of using a condom with any other form of contraception (like the pill, the patch or the ring) to protect against STIs and to increase contraceptive effectiveness to avoid an unplanned pregnancy. Latex condoms are effective in preventing most STIs.

Dental Dam



Male Condom



Female Condom



The chart below lists all the sexually transmitted infections. Viral infections are the most problematic because they are chronic infections which usually require ongoing treatment. Bacterial, parasitic and fungal infections are typically cleared up by the use of prescription medication.

<b>Viral</b>	<b>Genital Herpes (HSV)</b>	<b>Hepatitis B (Hep B)</b>	<b>Human Immunodeficiency Virus (HIV-AIDS)</b>	<b>Human Papillomavirus (HPV)</b>
<b>Bacterial</b>	<b>Chlamydia (LGV)</b>	<b>Gonorrhea (the Clap)</b>	<b>Syphilis (the Great Imitator)</b>	
<b>Parasitic</b>	<b>Pubic Lice (Crabs)</b>	<b>Scabies (Mites)</b>	<b>Trichomoniasis (Trich)</b>	
<b>Fungal</b>	<b>Yeast Infection (Candida)</b>			

## GENITAL HERPES or “HSV”

Viral

### How is it TRANSMITTED?

- Genital herpes is a viral infection transmitted through direct vaginal, oral or anal sexual contact with an infected partner
- By receiving oral sex from a partner with a history of cold sores
- Through asymptomatic shedding (transmission of the virus when there are no symptoms or lesions)
- From an infected woman to her infant during pregnancy or birth
- Less commonly, through fomite transmission-contact with contaminated objects such as towels

### What are the SIGNS and SYMPTOMS?

- Not all infected people develop symptoms
- Symptoms may emerge 2 to 21 days after initial infection; usually after 6
- Prior to an outbreak, the infected person may feel a tingling or burning sensation where the virus first entered the skin or—in the case of a recurrence—where there were lesions
- During an outbreak:**
  - Painful sores (external or internal)
  - Inflammation and redness
  - Fever
  - Muscular pain
  - Tender lymph nodes
- An outbreak resolves in 17 days for men and 23 days for women, on average
- Atypical signs and symptoms (without lesions): genital pain, urethritis, aseptic meningitis or cervicitis

### What are possible CONSIDERATIONS?

- Increased risk of transmitting or becoming infected with HIV
- Avoid sexual activity from the start of burning/tingling symptoms until all lesions have completely healed
- Pay attention to personal hygiene to avoid fomite transmission
- Be aware of the potential for recurrences; watch for signs and symptoms as they may not be obvious
- Condoms and drug therapy can reduce but not eliminate the risk of transmission. Condoms have limited effectiveness at preventing infection as they do not cover the entire genital area
- Though chronic in nature, herpes is a manageable infection. Counselling may be useful to help with relationship issues
- Advise your ob/gyn of your history of infection; precautions can be taken during pregnancy and delivery to minimize risk of transmission to the baby

### What are the TREATMENT options?

- Antiviral medications—acyclovir, famciclovir and valacyclovir—to be started as early as possible following the onset of symptoms
- Suppressive therapy, which inhibits viral reproduction and reduces outbreaks, can be considered for patients with frequent outbreaks (6 or more times per year)
- Other considerations for management during an outbreak:
  - Pain relievers and laxatives
  - Hospitalization, should urine retention become a problem

### Did you KNOW?

- There are two types of Herpes simplex virus:
  - HSV-1, traditionally associated with cold sores
  - HSV-2, traditionally associated with anogenital herpes
- The virus may cause a single outbreak or recurrences over time
- Recurrences may be triggered by:
  - The menstrual cycle in women
  - Emotional stress
  - Illness (especially fever)
  - Sexual intercourse
  - Surgery
  - Exposure to sun (including tanning beds)
  - Use of certain medications

## HEPATITIS B or “Hep B”

Viral

### How is it TRANSMITTED?

- Hepatitis B is a viral infection transmitted through anal, vaginal or oral sex with an infected person
- Through exposure to infected blood or blood products (for example, injection drug use with shared equipment, accidental exposure or needlestick)
- Occasionally from contact with shared household items (such as toothbrushes or razors)
- During childbirth (transmission from mother to infant)

### What are the SIGNS and SYMPTOMS?

- In up to 50% of people, there are no outward signs of infection
- Up to 8 weeks after exposure to the virus, some people experience flu-like symptoms including:
  - Tiredness
  - Nausea and vomiting
  - Decreased appetite
  - Rash
  - Joint pain
  - Yellowing of the eyes and skin (in rare cases)

### What are possible CONSIDERATIONS?

- All sexual and household contacts of people with hepatitis B should be advised to be vaccinated to prevent infection
- Chronic hepatitis B can lead to severe liver damage including cirrhosis (scarring of the liver) and cancer
- Babies born to mothers with hepatitis B are at a high risk of becoming chronic carriers; they should receive an injection of antibodies immediately after birth, followed by the vaccine

### What are the TREATMENT options?

- There is no cure for hepatitis B, but a vaccine to prevent the infection is available
- Most individuals recover from hepatitis B infection fully within about 6 months
- Individuals who are acutely infected with hepatitis B should abstain from sexual activity until their partner(s) have been screened and immunized if needed
- Household contacts should also be screened and immunized if needed
- If an individual is exposed, an injection of antibodies may be given (up to 7 days after a needlestick injury and up to 14 days after sexual contact), followed by the hepatitis B vaccine to help prevent infection. Infants born to infected mothers should receive an injection of antibodies immediately after birth followed by the vaccine within 12 hours
- Individuals with acute (non chronic) infections usually do not need antiviral medications
- Individuals who develop chronic hepatitis B infection require liver function monitoring and may benefit from treatment with interferon or an antiviral medication

### Did you KNOW?

- Hep B is a virus that affects the liver and is found in blood and body fluids including the vaginal secretions, semen, breast milk and saliva of infected individuals
- Most infected people (90%) naturally produce antibodies to fight the disease, but some develop chronic hepatitis B; they carry the virus all their lives and are infectious for life
- Chronic infection can significantly damage the liver
- Hepatitis B is most common in developing countries

## HUMAN IMMUNODEFICIENCY VIRUS or “HIV-AIDS”

Viral

### How is it TRANSMITTED?

- HIV is a viral infection that is transmitted through the body fluids of an infected person (blood, semen, pre-semen, vaginal secretions, breast milk) enter the blood stream of another individual—specifically, from:
- Unprotected vaginal, oral or anal sex
  - Use of contaminated sex toys
  - Shared needles or other drug equipment (for example, water, cookers or crack pipes)
  - HIV-infected blood or blood products
  - Household items such as toothbrushes and razors that have touched infected blood
  - Transmission during pregnancy, childbirth or breastfeeding (transmission from mother to child)
  - HIV cannot be transmitted by mosquitoes or other insects that have made contact with infected blood, nor can it be transmitted through saliva, sweat, tears, urine or feces of infected individuals, unless blood is present

### What are the SIGNS and SYMPTOMS?

- Two to 4 weeks after exposure, some infected individuals may experience mild flu-like symptoms that last a few weeks then disappear
- For most people, symptoms don’t emerge until years after exposure
- Once the immune system is weakened, the following may develop:
  - Frequent fever or sweats
  - Joint or muscle pain
  - Persistent skin rashes
  - Swollen glands
  - Sore throat
  - Fatigue or lack of energy
  - Headaches
  - Rapid, unexplained weight loss
  - Nausea, vomiting, or diarrhea
- A blood test to check for HIV antibodies is the only way to detect HIV infection. It may take up to 3 months for an infection to be detectable. Anyone at high risk who tests negative initially should retest 3 months later for certainty

### What are possible CONSIDERATIONS?

- Once AIDS has set in, other afflictions may occur such as:
  - Infections: pneumocystis jiroveci (previously known as PCP), cytomegalovirus (CMV) causing loss of vision, candidiasis (esophageal, lungs, bronchial, vaginal), mycobacterium avium complex, mycobacterium tuberculosis
  - Cancers: cervical, anal, Kaposi sarcoma and lymphoma
  - Increased frequency or severity of herpes outbreaks
  - Conditions affecting the brain including toxoplasmosis
  - Chronic intestinal disturbances
- In Canada, it is estimated that 27% of people with HIV do not know they are infected and risk transmitting the virus to others
- Infected individuals should seek guidance from their health-care providers
- Individuals diagnosed with HIV should inform sexual partners of their status. Failure to disclose may have legal implications

### What are the TREATMENT options?

- No cure exists for HIV-AIDS. Treatments are continually evolving, helping people living with HIV-AIDS control the virus and its symptoms
- Anti-retroviral therapy (ART) helps slow the progression of the infection and can help the immune system restore itself
- Though available HIV medications have lengthened the average time from infection to progression to AIDS, there are significant side effects that may affect quality of life. People on ART need to be monitored closely by a specialist for their response to treatment and side effects

### Did you KNOW?

- The virus destroys cells critical to a person’s immune system, robbing the body of its ability to fight other infections and illnesses
- HIV weakens the immune system over time (months to years) until other infections occur and Acquired Immunodeficiency Syndrome or AIDS (the fatal stage of HIV infection) develops

## HUMAN PAPILLOMAVIRUS or “HPV”

Viral

### How is it TRANSMITTED?

- HPV is a virus transmitted through direct sexual contact—primarily vaginal and anal sex, but oral sex is also a risk
- Other sexual activity with intimate contact (genital rubbing or activity causing friction)
- To an infant during delivery (rare)

### What are the SIGNS and SYMPTOMS?

- Many individuals infected with low-risk types have no symptoms (do not develop visible warts or lesions)
- In some people, anogenital warts develop within 1 to 8 months on the vulva, cervix, penis, scrotum, anus or in the urethra. These can be small, soft, flesh-coloured growths, with a cauliflower-like appearance
- The size and number of warts may change over time; eventually most will clear
- During pregnancy, warts may increase in size and number then regress/resolve after delivery
- Other symptoms may include:
  - Itchiness
  - Discomfort during intercourse
  - Bleeding with intercourse

### What are possible CONSIDERATIONS?

- Genital wart recurrences are common even with treatment
- Cervical, vulvar, vaginal, anal, penile and other cancers
- Obstruction of the urethra or vaginal opening
- Depression and sexual dysfunction in chronic cases
- Specialist referral is required for atypical and/or non-healing warts
- Counselling may be useful to help with relationship issues that may arise from the complex nature of the infection
- Although partner notification is not required, patients are encouraged to notify their partners that they have had genital warts or an abnormal Pap smear

### What are the TREATMENT options?

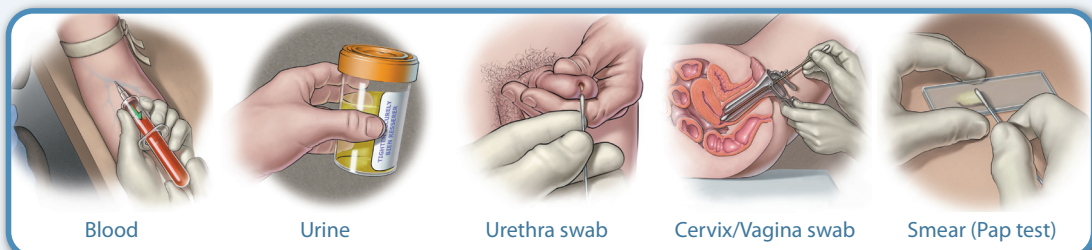
- There is currently no cure for women and men infected with the virus
- Vaccination is available to prevent certain types of HPV. (Note: In Canada, vaccination has been approved for women aged 9 to 45 and men aged 9 to 26.)
- Depending on their size, number and location, genital warts can be treated using several different options, for example strong acids and chemicals, topical cream, liquid nitrogen, electric currents or laser therapy

### Did you KNOW?

- HPV is one of the most common sexually transmitted infections
- There are over 100 types of HPV; 40 can cause anogenital infection
- It is estimated that 75% of the adult population will have at least one HPV infection during their lifetime
- Low-risk HPV types cause anogenital warts and other benign lesions
- High-risk HPV types are associated with cancer (mainly of the cervix)
- Most HPV infections clear on their own within 1 to 2 years
- You can visit [www.hpvinfos.ca](http://www.hpvinfos.ca) to get all your facts

## Testing and Screening Methods

The early detection and treatment of STIs is critical to prevent further spread of infections.



The main methods of testing/screening are:

- Blood test:** syphilis, genital herpes, hepatitis B, HIV
- Urine test:** chlamydia, gonorrhoea
- Swab/smear:** chlamydia, gonorrhoea, syphilis, genital herpes, trichomoniasis, yeast infection, HPV
- Physical exam:** HPV, trichomoniasis, pubic lice, scabies

Approaches differ by infection and gender, and may vary across Canada.

Watch the videos on [www.sexualityandu.ca](http://www.sexualityandu.ca) to view testing and screening methods

## Resources available at

[Sexualityandu.ca](http://www.sexualityandu.ca)

### Videos:

- My first pelvic (Pap test) and breast exam
- My first contraception and STI exam
- All about STIs
- Hear our stories
- How to put on a condom demo

### Games:

- Sex-Fu Challenge
- Test your sexual IQ at sexU

### Media:

- Matte stories: Oral sex and STIs

### Other:

- Virtual Scenarios: See where your sexual choices lead you

Over for bacterial, parasitic, and fungal STIs >>>

