

#### What is HPV?

Human papillomavirus (HPV) infections are the most common sexually transmitted infections (STIs) in the world. There are over 100 types of human papillomaviruses, and 40 types are known to affect the anus and genital area of humans. It is estimated that around **75% of sexually active Canadians** who have not been immunized against HPV will have an HPV infection at some point in their life. While most HPV infections will go away on their own and not cause any symptoms, infection can sometimes lead to genital warts and cancers.

## You should know

You can be infected with more than one type of HPV at a time.

#### What are the symptoms?

Most HPV infections will not cause symptoms, and the body will rid itself of the virus within two years. However, sometimes HPV stays within the body and can lead to genital/anal warts and a variety of cancers, including cervical, penile, head, and neck cancers.

Some types of HPV are classified as **high risk**, as they can lead to cancers of the anus and genital area, cervical cancer, and certain cancers of the head and neck. Some of these high-risk HPV types include types **16**, **18**, **31**, **33**, **45**, **52**, and **58**. These types of HPV do not lead to warts.



Other types are classified as **low risk**, as they do not lead to cancer – but they can lead to lesions such as genital and anal warts. Some of these low-risk HPV types include types **6** and **11**. Warts can range in appearance and size. For example, some warts may appear as small bumps, while others may have a large "cauliflower"-like appearance. The warts caused by HPV do not normally cause discomfort, but they can sometimes become itchy, burn, or bleed.

There are two HPV vaccines approved for use in Canada: the HPV2 vaccine (Cervarix®) and the HPV9 vaccine (Gardasil®9). Both vaccines protect against high-risk HPV types 16 and 18 — the two types that cause the majority of HPV-related cancers. The HPV9 vaccine additionally protects against high-risk types 31, 33, 45, 52, and 58, as well as low-risk types 6 and 11.

Vaccine availability differs by province and territory.

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## Human Papillomavirus (HPV): What you need to know



### How does it spread?

HPV is mainly spread through sex involving **skin-to-skin** contact, such as frontal/vaginal, oral (performed on the anus or genitals), fingering, and anal, amongst others. HPV can spread from one partner to another, even if the person with HPV has no visible symptoms such as warts. HPV is also spread when someone comes into contact with warts caused by HPV.

Although rare, HPV can also be passed from birthing parent to baby during childbirth, if the birthing parent has genital HPV infection.

### Who is affected by HPV?

Anyone of any age, gender, or sexual orientation can get HPV. However, there are some groups that get it more than others. For people who have previously had another sexually transmitted infection (STI) or those who have a weakened immune system (for example, if they have HIV), the chances of getting HPV can be higher.

Gay, bisexual, and other men who have sex with men (gbMSM) get HPV at high rates, including with types 16 and 18, which lead to most HPV-related cancers. There is research that shows that gbMSM are 20 times more likely to develop anal cancer than other men who do not have sex with men. As the HPV vaccine was initially offered only to girls and women in Canada, men may not have received the same messaging around how to protect themselves from HPV. Knowing more about HPV, how it can affect one's health, and how to prevent it can help gbMSM make informed decisions about their sexual health.

As well, gbMSM face other barriers to cancer care and HPV immunization uptake. These barriers include fear — or the experience of discrimination by healthcare professionals and having a previous negative experience with the medical system due to their sexual orientation, among others.



Evidence is also emerging that trans and gender-diverse (TGD) people are more affected by HPV types that can cause cancer at high rates. TGD people face similar barriers to cancer care as those faced by gbMSM, including fear of discrimination and having previous negative experiences with the healthcare system. As well, healthcare professionals generally have a lack of knowledge about TGD-specific cancer care. Knowing about HPV, how it can affect their health, and how to prevent it can help TGD people make informed decisions about their sexual health.

In general, the more sexual partners you have had, the more likely it becomes that you will be exposed to, or will have previously been exposed to, HPV. Remember, this is a generalized statement, as you can still be exposed to HPV the first time you partake in sexual activities if your partner(s) has/have HPV.

## Human Papillomavirus (HPV): What you need to know



### Who should be immunized against HPV?

- Adolescents and children as young as 9 years of age, depending on the childhood immunization schedule in their province/territory.
- Adults who have not previously been vaccinated against HPV.
  - Even if you are already sexually active, getting the HPV vaccine can protect you against any HPV types you have not been exposed to.
- Gay, bisexual, and other men who have sex with men (gbMSM).



Publicly funded immunization schedules for HPV may vary between provinces and territories.

# Why is HPV immunization recommended for children starting at the age of nine when they are not sexually active?

Getting vaccinated against HPV before becoming sexually active ensures that when someone does decide to have sex later on in life, they are protected against HPV. Even the first time someone partakes in sexual activities can expose them to HPV, so it is better to protect against HPV infection sooner rather than later.

### Are you protected against HPV?



### HPV vaccines are safe and the most effective way to prevent HPV infection.

Talk to your doctor, nurse, pharmacist, or local public health office about getting the HPV vaccine for yourself or for your child/adolescent.

#### References

Public Health Agency of Canada. (2021.) Canadian Immunization Guide. Human papillomavirus vaccine. <a href="https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-9-human-papillomavirus-vaccine.html#rf">https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-9-human-papillomavirus-vaccine.html#rf</a>

Health Initiative for Men. (2021.) HIV + STIs 101. https://checkhimout.ca/more-than-sex/hiv-stis-101/

Cleveland Clinic. (2022.) HPV (Human Papillomavirus). https://my.clevelandclinic.org/health/diseases/11901-hpv-human-papilloma-virus

Centers for Disease Control and Prevention. (2022.) Genital HPV Infection - Basic Fact Sheet. https://www.cdc.gov/std/hpv/stdfact-hpv.htm

GAVI. (2023.) Trans and gender-diverse people face higher risk of some cancers, and those cancers being missed. <a href="https://www.gavi.org/vaccineswork/trans-and-gender-diverse-people-face-higher-risk-some-cancers-and-higher-risk-those">https://www.gavi.org/vaccineswork/trans-and-gender-diverse-people-face-higher-risk-some-cancers-and-higher-risk-those</a>

Children's Hospital of Philadelphia. (2021.) Questions and Answers about HPV and the Vaccine. <a href="https://www.chop.edu/centers-programs/vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center/questions-answers-about-hpv-and-vaccine-education-center-programs/vaccine-e