



What Everyone Should Know About Human Papillomavirus (HPV): Questions and Answers

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What is HPV?

There are over 100 types of human papillomavirus (HPV), each one having a number to identify it, for example HPV-6, HPV-11, HPV-16 and HPV-18. Human papillomaviruses are viruses that can infect many parts of the body. Some types of HPV are sexually transmitted and can cause warts or other consequences such as cancer (e.g., cervical, penile and anal). The types of HPV that infect the anal and genital (anogenital) areas are not the same as the ones that infect other areas of the body such as the fingers, hands and face. The types which cause anogenital warts do not usually cause cancer.

The various types of HPV are often classified into low and high risk according to their association with cancer. The “low-risk” types are rarely associated with cancer. The “high-risk” types are more likely to lead to the development of cancer. Although certain types are associated with cancer, the development of HPV related cancer is considered a rare event.

What are the signs and symptoms of HPV infection?

Most people who have an anogenital HPV infection do not know they are infected. Most HPV infections occur without any symptoms and go away without treatment within a couple of years. However, in some people HPV infections can persist for many years.

Some people with a HPV infection may develop anogenital warts (see below: “Does HPV cause anogenital warts?”). The precancerous and cancerous changes that may result from HPV infection usually do not present with any noticeable symptoms, and therefore regular health check-ups are essential. For women, screening for cervical cancer (see below: “Is there a test for HPV, cervical cancer or anogenital warts?”) should be routinely completed according to local recommendations.

Does HPV cause anogenital warts?

Some HPV infections, mostly HPV-6 and HPV-11, can cause anogenital warts. Anogenital warts are usually flesh-coloured, soft to the touch and may appear as tiny flat bumps, or bumps that look like cauliflowers. They are usually painless but may itch. They usually grow in more than one location and may cluster in large groups. Sometimes anogenital warts can be present but may not be visible if they are internal (i.e. inside the vagina or rectum) or if they are on the skin but are too small to be seen. Anogenital warts do not



turn into cancer. If you are sexually active, you should have regular check-ups. If you think you have warts you should speak with a health care professional.

What is the link between HPV infection and cervical and other cancers?

Persistent HPV infection, with high risk types is the cause of over 99% of cervical cancers.

HPV can also play a role in the development of cancers of the anus, penis, oropharynx (in the throat, at the back of the mouth) and other areas of the female genital tract such as the vulva or vagina. The degree to which HPV is associated with these cancers varies by the particular type of cancer.

How does someone get HPV?

HPV is estimated to be one of the most common sexually transmitted infections in Canada and around the world. Any person who is sexually active can get the virus. Studies show that approximately 75% of sexually active men and women may acquire an anogenital HPV infection, at some point in their lives. Most HPV infections occur without any symptoms and go away without treatment within two years.

The types of HPV that cause anogenital warts (mostly HPV-6 and HPV-11) are spread by skin-to-skin contact, usually during vaginal, anal, or possibly oral sex with someone who has this infection. It is possible, however, to become infected with the virus without having penetrative sex if you come into contact with an infected area (skin-to-skin) in the anogenital region. HPV is more likely to be transmitted when warts are present, but the virus(es) can be transmitted even when there are no visible warts.

It is possible to be infected by more than one type of HPV at a time.

Does HPV infection mean that someone has cheated in a relationship?

A recent diagnosis of anogenital warts or HPV related precancerous or cancerous lesion(s) does not necessarily mean that a partner has been unfaithful. Infection with HPV may have occurred years ago and the virus can remain in the body for weeks, years, or even a lifetime, without any sign of an infection. This makes it hard to know exactly when or from whom someone got the virus. There is no way to find out how long a particular infection has been there. Most people who are infected with anogenital HPV are not aware of it.

Is there a test for HPV, cervical cancer or anogenital warts?

There are DNA tests available which can be of benefit in detecting an HPV infection in certain situations. In Canada, HPV DNA tests have been approved for use in women, but availability is limited. HPV DNA testing is not usually part of a regular check-up, pelvic exam, screening tests for sexually transmitted infections or a Pap (Papanicolaou) test. In those regions which recommend and use HPV DNA testing in certain situations, it is used in conjunction with the results from a Pap test to determine the need for further testing and management. Ask your health care provider about HPV DNA testing recommendations in your region.

The Pap test is used to detect abnormal cells in the cervix and regular Pap tests can help to find abnormalities or changes in the cervix before cancer develops. For more information, see the ["It's Your Health" Fact Sheet on screening for cervical cancer](#). The recommendations for Pap screening vary depending on the province or territory you live

in. Ask your local health care provider about the recommended Pap test intervals in your region.

There are currently no HPV DNA tests approved for men outside of scientific studies. For more information, see the [“Human Papillomavirus \(HPV\) and Men”](#) fact sheet.

Anogenital warts are diagnosed by visual inspection during a physical exam by a health care professional. There is no reliable test available for men or women that can detect anogenital warts. It is important to remember that just because you cannot see warts, does not mean that you do not have any. They may be small, or in a place where they are not visible, such as inside the vagina or rectum. It is important to have regular check-ups by a health care professional.

What happens if you have an abnormal Pap test result?

For women, if the Pap test shows abnormal cells, the health care professional will determine what needs to be done according to the type of changes that have occurred in the cells. The health care professional may simply monitor you for further changes or request further investigations. These may include a repeat Pap test, HPV DNA testing (when indicated, where available and where included in provincial or territorial recommendations) or a referral to a colposcopist, who will examine the cells of your cervix using specialized equipment. Small biopsies of tissue from the cervix may be taken to determine the extent of the cell abnormality. Cryotherapy (freezing), electrosurgery (using electric current) or laser surgery may be necessary to remove the abnormal cells. The management decision will depend on many factors, including the degree of abnormality on the Pap test.

Can HPV be treated?

Although there is no cure for HPV infection, warts, lesions and precancerous and cancerous changes caused by the virus can be managed and/or treated. No treatment guarantees that the HPV infection is no longer present in the body.

Some treatments for anogenital warts, such as cryotherapy (freezing the warts), are done in a clinic or doctor's office while other treatments, such as prescription creams, can be used at home. Repeat treatments are often necessary. Just because you can no longer see the wart does not mean the HPV infection is gone - the virus may still be present which means you could develop warts again without being re-exposed to the virus. For most people, warts will clear on their own over time.

The lesions and precancerous changes caused by high risk types of HPV can be treated if a health care provider feels that it is necessary. A large number of these infections will clear without any treatment. Only a small number of high risk persistent infections will progress to cancer. As with many other cancers, early detection is one of the key factors to successful treatment.

Discuss treatment options with a health care professional to determine which treatment choice may be best for you. People who are immunocompromised, especially those who are HIV-positive, may require special care.

How can you protect yourself from getting HPV?

While condoms do not eliminate the risk of HPV infection, using a condom, consistently and properly, during vaginal, anal and oral sex decreases the chances of getting HPV or passing it on to your partner. You need to remember that a condom can only protect the area it covers so it may be possible to become infected by any uncovered warts (e.g., on the scrotum). Using a condom will also help to protect you from other sexually transmitted infections and reduce the chances of unintended pregnancies.



Other ways to reduce your risk of infection include delaying sexual activity (waiting until you are older), limiting your number of sex partners and considering your partners' sexual history as this can create a risk to yourself (e.g., if they have had multiple previous partners).

There are now two HPV vaccines authorized for use in Canada: Gardasil[®] and Cervarix[®].

Gardasil[®] provides protection against four HPV types: two that cause approximately 70 per cent of all cervical cancers (HPV-16, HPV-18) and two that cause approximately 90 per cent of all anogenital warts in males and females (HPV-6, HPV-11). It is approved for use in females and males aged 9 to 26.

Cervarix[®] provides protection against the two HPV types that cause approximately 70 per cent of all cervical cancers (HPV-16, HPV-18). It has been approved for use in females aged 10 to 25.

For more details on the HPV vaccine see the [Human Papillomavirus \(HPV\) Prevention and HPV Vaccine fact sheet](#).

Can cervical cancer be prevented?

It is possible to prevent cervical cancer through screening, which can detect abnormal cells and precancerous changes before they progress to cancer. Women are screened for cervical cancer and precancerous changes when they have a regular Pap (Papanicolaou) test by a health care professional.

Both available HPV vaccines protect against two high risk types of HPV (16 and 18) which cause approximately 70% of cervical cancers. Even when someone is vaccinated it is still possible to become infected with one of the types of HPV that the vaccine does not protect against. Therefore, it is still important that vaccinated girls/women continue to have regular Pap tests.

What about pregnancy and anogenital warts?

HPV does not interfere with a woman's ability to get pregnant. Most pregnant women who have previously had anogenital warts, but no longer do, would be unlikely to have any complications or problems during pregnancy or birth. However, anogenital warts can increase in size and number during pregnancy.

Rarely, a pregnant woman can pass HPV to her baby during vaginal delivery. Cesarean section is not recommended unless the warts obstruct the birth canal.

What else is important to know about HPV infection?

Remember, HPV infections are common. People should not be judged negatively because they have an infection that is transmitted sexually, as it is not a reflection of personal character. It is important to realize that even with HPV or another sexually transmitted infection it is still possible to lead a healthy balanced life, including a fulfilling sex life. Considering the link between HPV and cancer, it is important to remember that very few women who have HPV will develop cervical cancer. However, it is important for women to follow their doctor's/nurse's advice related to cervical cancer screening and any necessary treatment or follow-up.