



Toronto People With AIDS Foundation

Treatment Bulletin

Human Papilloma Virus & HIV

June 2010



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The Treatment Resources Program at the Toronto People With AIDS Foundation provides information and resources to empower people living with HIV/AIDS to be proactive around their health by working in partnership with their health care providers. We do not recommend or promote any treatment in particular. We strongly urge those interested in any specific treatment to consult a wide range of resources, including a qualified medical and/or complementary therapy practitioner who has experience in working with HIV+ individuals.

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What is HPV?

Human Papilloma Virus (HPV) is one of the most common sexually transmitted infections in Canada and globally. Up to 75% of men and women who are sexually active will contract HPV during their lifetime and it is estimated that anywhere between 10-30% of Canadian adults are infected with HPV at any given time. The highest rates of HPV infection occur in adults aged 15-24.

HPV actually includes a group of over 100 types of viruses (strains) and the different strains can have different impacts on your health. For example, different strains can cause warts or lead to various types of cancer. Lower risk strains of the virus can cause common skin warts or plantar warts (warts on the bottom of the feet) or warts on the genitals or anus, whereas higher risk strains can cause cancer of the cervix in women, penile cancer in men, and anal cancer. HPV can also be non-sexually transmitted and occur on the skin anywhere in the body.

How do you get HPV?

HPV is spread through direct contact with skin that is infected with the virus. When HPV occurs in the genital area it is sexually transmitted. In addition to skin-to-skin contact with the penis, scrotum, vagina, vulva, or anus, HPV can be transmitted through contact of a partner's genital with your mouth. Genital warts are highly contagious and most people who come in contact with an infected partner will develop warts themselves within approximately 3 months.

Most people are exposed to HPV early on when they become sexually active and prevalence rates of HPV increase with increasing numbers of sexual partners. It is important to note that condoms are not 100% protective against HPV transmission because the virus can appear on areas outside of that covered by a condom.

What are the symptoms of HPV?

Many who are exposed to HPV will never develop symptoms and the infection will clear the body on its own. Some however, will develop symptoms depending on the strain that they are exposed to.

Some low-risk strains of HPV can cause genital warts, which can appear weeks or months after exposure. These look like small cauliflower-shaped lesions or can be flat and raised and can occur in various locations. Warts can appear in the thighs, rectum, anus or urethra in both males and females. In women they can also appear on the cervix, external genitals, or in the vagina. In men warts can also appear on the scrotum or penis.

Many people are unaware that they've been infected since the warts can appear internally, in the rectum, vagina, or urethra, and often produce no other symptoms. Getting regular screening exams is important if you are sexually active.

For higher risk strains that can cause cancer, the symptoms will vary depending on the location. You'll find more information on HPV and the cancers it is linked to in the HPV & Cancer section of this treatment bulletin.

How is HPV diagnosed?

HPV may be obvious if genital warts are present and your doctor will be able to make a diagnosis by examining them. If you have no symptoms or the strain is one of the high risk ones that can lead to cancer, it may not be so obvious and special tests can be used to detect the changes associated with high-risk HPV infection.

In women, yearly Pap smears are a regular screening tool for cervical cancer, which is strongly linked with HPV. In fact, almost all cervical cancers are caused by HPV. Pap tests are generally painless and take a sample of cells from your cervix, which are then looked at under a microscope to check if there are any abnormal cell changes. Cells go through a slow series of changes before they turn into cancer and Pap smears can show if your cells are going through these changes long before you have cancer. These irregular cell changes are known by the term "dysplasia", or "cervical dysplasia", when they occur on the cervix.

There is an HPV DNA test available for women who have cervical dysplasia, however, it is only recommended for women over the age of 30. Those under the age of 30 are likely to clear up the infection on their own and so testing is not considered necessary. The test is performed in the same way as a pap smear but the cells are tested for the presence of DNA belonging to a number of HPV strains and isn't specific for one particular type.

The test may not be available everywhere in Canada and may not be covered by provincial health insurance plans in all cases. There is no HPV DNA test currently approved for men.

Similar changes that occur in the cervix can also occur in an HPV-infected anal canal. Pap tests of the anus can also be performed to help diagnose irregular changes. Men and women who have receptive anal sex should regularly be screened for anal dysplasia, as this type of sexual activity is associated with increased risk. If a pap test of either the cervix or the anus comes back abnormal, a biopsy of the area may be performed to confirm the diagnosis. It is important to remember that dysplasia is NOT cancer but should be treated to prevent it from possibly developing into cancer.

HPV & HIV

HPV is particularly concerning for people living with HIV/AIDS. The immune system plays a role in helping our bodies to keep cancer and infections like HPV under control. When the immune system is compromised due to HIV infection, the body has a more difficult time controlling infections and makes HPV complications such as cervical and anal cancer more likely to occur. For this reason routine screening is important for those living with HIV/AIDS.

HPV & Cancer

We know that there is a strong link between HPV and certain cancers, particularly cervical, vaginal, anal and penile cancer. With these types of cancers it is very important to get screened regularly since they do not always show signs or symptoms until they are in more advanced stages.

The following is a list of signs and symptoms that can occur with the various types of cancers that HPV is linked to:

Signs and symptoms of anal cancer:

- Anal bleeding, pain, itching, or discharge
- Swollen lymph nodes in the anal or groin area
- Changes in bowel habits or shape of your stool
- There may be no signs or symptoms

Signs and symptoms for penile cancer:

- Initial signs: changes in skin colour, skin thickening or tissue build up on the penis
- Later signs: a growth or sore on the penis that is usually painless but can become painful and bleed.
- There may be no symptoms until the cancer has advanced significantly

Signs and symptoms of cervical cancer:

- Vaginal bleeding after intercourse, between periods, or after menopause has occurred
- Watery, bloody vaginal discharge that may be heavy and have a bad odor
- Pelvic pain or pain during intercourse
- The initial stages often have no signs and symptoms and so it is important to be screened regularly

If you experience signs and symptoms that are out of the ordinary you should always get them checked by your health care provider. Unfortunately routine screening anal Pap smears are not currently being used outside of research, and not all labs have a doctor who is trained in examining anal pap specimens. Speak to your doctor if you feel that you might be at risk for developing an HPV-related cancer – the doctor may be able to connect you with a clinic that performs anal pap smears.

How do you treat HPV?

HPV can be treated in several ways depending on the site of infection. In many cases, the body will clear the infection on its own, however, people living with HIV/AIDS may have more difficulty doing so and require more regular screening and treatment.

Genital warts can be treated with medicine, frozen or burnt off, or surgically removed by your doctor. Warts can often come back within a few months after they are treated and so the treatment may need to be repeated several times.

Abnormal cells on the cervix can be treated with laser, freezing or surgical removal if they do not return to

normal on their own. You and your doctor will decide which option is best for you as not all options may be suitable, especially if you plan on becoming pregnant.

If you are a smoker, it is important to consider quitting if you have a persistent HPV infection. Smoking and infection with high-risk HPV strains has been shown to significantly increase your risk for developing precancerous cells on a pap test (cervical dysplasia).

If you are diagnosed with cervical, anal, or penile cancer treatment options include surgery, radiation and chemotherapy, as are often used in other forms of cancer. While a cancer diagnosis is alarming, you should know that these types of cancers can be treated successfully. Even with successful treatment, however, it is important to continue to be regularly monitored afterward.

How can you prevent HPV?

Since HPV is so common and usually invisible, the only definite way of preventing it is not to have sex. Having a monogamous relationship with a partner who does not have HPV can also prevent you from being exposed, however, because there can be no symptoms there is no sure way to test if you or your partner have been exposed from previous relationships. Using condoms all the time may lower your chances of contracting HPV or passing HPV to your partner but keep in mind that HPV can infect areas that are not covered by a condom.

An HPV vaccine is now approved for use in Canada. While initially only approved for use in girls and young women aged 9-26, it has now been approved for use in boys and young men in the same age category. The vaccine is intended to prevent 90% of genital warts cases in both males and females, and decrease the risk of HPV-related cancers in females.

The HPV vaccine is intended to be used for prevention and not to treat ongoing HPV infection. The vaccine targets the four strains of HPV most associated with cervical cancer and genital warts and so may not be protective against other strains. Other strains of HPV can still cause warts or cancer. If you are vaccinated you should continue to be regularly screened.

Tips for preventing HPV and its related cancers:

- Make informed decisions about your sexual health by talking to your sexual partner(s) about their sexually transmitted infection (STI) history and using protection.
- Using condoms can decrease your risk not only for HPV but also for other STIs such as syphilis.
- Have regular screening exams such as a Pap test.
- Talk to your doctor about whether a vaccination is appropriate for you.
- Don't assume that if you've been vaccinated, you cannot get HPV. Vaccines currently approved for use are only available for a select number of strains.
- If you smoke, consider quitting. Talk to your doctor or health care professional about resources and programs available to help you quit.
- Always have any new and unusual symptoms investigated by your doctor.

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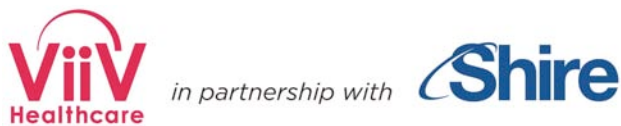
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Mission

The Toronto People With AIDS Foundation exists to promote the health and well-being of all people living with HIV/AIDS by providing accessible, direct, and practical support services