

**Human Papilloma Virus (HPV) and Genital Warts (Condyloma)**  
***Most Frequently Asked Questions***

**What is HPV?**

HPV is an abbreviation for human papilloma virus, sometimes called genital wart virus or condyloma. There are over 100 sub-types, each of which is specific for a particular part of the human body (for example, the common finger wart). At least 30 different subtypes of HPV are specific for the genital tract. Only a few of these are strongly associated with the development of pre-cancers and cancers.

In women, cervical cancer is the most common cancer, but vaginal and vulva (labial) cancers are increasingly common. In men, penile cancers have occurred. In both men and women, anal cancers also arise. It is now believed that HPV must be present for certain types of cancers to happen. There also may be other co-factors such as cigarette smoking, dietary deficiency, alcohol, some illicit drug use, herpes and/or other sexually transmitted diseases, and poor immune defenses (as could occur with HIV/AIDS, renal disease, and other cancers).

We suspect that HIV positive men and women with HPV are at higher risk for progression of the HPV to invasive (spreading) ano-genital cancers from the initial exposure or infection with HPV.

---

**How do you know if you have HPV?**

In some people the virus causes warts, which are painless cauliflower-like fleshy growths of varying size in moist areas - particularly in the genital region, the anal region and, rarely, the mouth. Sometimes there are no visible lesions and Pap smear and High Resolution Anoscopy (HRA) can only detect the presence of the virus.

**Who gets HPV?**

HPV is one of the most common sexually transmitted agents. Current estimates say that approximately 75% of the sexually active population acquires at least one genital HPV type during their lifetime. Any sexually active person can be infected with HPV from a male or female partner, who carries the virus in their ano-genital tract whether or not they have visible lesions or warts. It may take as little as one exposure to a partner, who has the virus, to be infected. However, the more sexual partners, the greater the chances of exposure and infection with many HPV types.

Much less common, HPV is spread from mother to child at the time of birth. In about 1 in 2000 pregnancies with HPV infected mothers, the baby's larynx will become infected by swallowing secretions containing the HPV during passage through the vagina at birth.

## How is HPV spread?

HPV is sexually transmitted through genital-genital, oral-genital and anal-genital contact. The virus infects the skin and mucous membranes of the anus and genital areas. While HPV does not spread through the bloodstream, it does enter the cells of the genital skin and, in some settings, the virus will incorporate into the nucleus of these cells. Like the herpes virus, HPV will live in the skin of the genital tract for many years. While the majority of HPV infections are harmless and without symptoms, in some situations the virus can trigger the development of warts, pre-cancers, or cancer.

The majority of carriers of HPV have no clinical evidence - which means that, though they are infected with HPV, they are not aware of being infected because they have no visible lesions. If you have a past or current history of multiple sexual partners, it is not possible to detect from whom or when you acquired the HPV infection. Both heterosexual and homosexual transmission of the virus has been described. Auto-inoculation (spreading of the virus to different parts of your own body) is also a way that the virus is carried to other areas of the body (e.g. oral cavity or fingers).

## How is HPV diagnosed?

Often HPV, especially external lesions, can be diagnosed by simple visual inspection. Internal lesions usually require a Pap smear test. The Pap smear exam is where a Q-tip gently is inserted into the anus and rotated around to collect some cells from the anal canal. This whole procedure only takes between 15 and 20 seconds. It is painless, but some patients may feel a bit of scratchiness during the procedure.

## How is it treated?

As with all other viral infections, there is presently no treatment for the HPV infection itself. However, the manifestations of the virus, such as warts, low-grade squamous intraepithelial lesions (LSIL), dysplasia (a pre-cancerous condition which is now called a high-grade squamous intraepithelial lesion or HSIL), and even cancer can be treated.

When HPV is discovered, it can be treated by several methods such as topical application of bi-/trichloroacetic acid (BCA/TCA) or podophyllin, 5-FU, freezing with liquid nitrogen or cryocautery, surgical excision, electrocautery, or laser vaporization. There are some newer methods such as imiquimod (Aldara®), cidofovir, interferon, infrared coagulation, and an HPV vaccine (in clinical trials). The choice of treatment will depend on the location involved as well as the extent and severity of the infection. Adequate treatment will require multiple applications. However, no treatment can guarantee complete eradication of the HPV virus.

## What can you do if you have HPV?

Acquiring and maintaining good health habits is crucial. This includes: good diet, quitting smoking, regular exercise, stress reduction, proper hygiene and limiting alcohol consumption.

Follow-up is recommended with your health care provider. This will greatly decrease the chance of HPV causing anal or genital cancers

## How can you protect yourself from getting or spreading HPV?

Transmission of the virus is possible even when no warts are visible; so, *safer* sex techniques must be used consistently. Use a condom with foreplay and every sexual act including genital-to-genital touching, anal and vaginal intercourse, fingers and sex toy contact. Since HPV can also be on the scrotum and skin at the base of the penis, there is still some risk of transmission. It is possible that spermicide may be viricidal (inhibits or destroys viruses) as well. Even when both partners are infected, it is important to use safer sex techniques so as not to take a chance of exposing each other to more HPV types. Inform sexual partners if you have HPV - and that it can be transmitted. Recommend that your partner have an anal Pap smear. We will be happy to evaluate him/her in our clinic.

**If you have any further questions, please call our office.**

© 2006 Proctology Associates of Maine