

Patient Information:

Human Papilloma Virus (HPV) Genital Warts Questions and Answers

Warts in all body locations are caused by the human papilloma virus. Over 100 types of HPV have been identified, and approximately 40 of these types cause sexually transmitted diseases in the genital area. HPV infection is, by far, the most common sexually transmitted disease (STD) with an estimated 1/3 of sexually active adults in the U.S. currently or previously infected. The 15-30 year old age group has the highest incidence of infection. The virus is highly contagious with some studies estimating a 50% risk of infection from a single act of unprotected intercourse with a partner with visible genital HPV. Although condoms provide some protection, they may not be as effective in preventing HPV infection compared to some STDs, because of the ability of the virus to grow in areas not protected by the condom.

How is Genital HPV Diagnosed?

The most visible form of HPV infection is genital warts, also known as condyloma acuminata. These fleshy growths may appear singly or in groups in the genital area and/or around the anus, usually cause no symptoms, and often increase in number and/or size as time passes. Visible genital warts, which make up only about 10% of all genital HPV infections, often have a characteristic appearance and can be diagnosed on visual inspection by an experienced practitioner.

Most individuals have a subclinical infection of HPV which means they do not show signs or symptoms of genital warts but they may be able to pass the virus to sexual partners. There are areas of the body which may serve as hidden sources of infection for individuals. Males may carry the virus inside the urethra or opening to the bladder and females may be infected inside the vagina and on the cervix. Both males and females may carry the virus in the anal areas.

The Pap Test may detect hidden or subclinical HPV infections of the cervix in women and anal areas of both men and women.

How is HPV Transmitted?

The vast majority of genital HPV infections are transmitted by genital skin to skin or sexual contact. The virus can infect the mouth following oral-genital contact and the anal area following ano-genital contact with an infected person. The incubation period, the time from initial

exposure to the development of infection, can be as long as 12 months. Because of the long incubation period and the subtle nature of most infections, it is often impossible to know how long the infection has been present. Genital HPV infection can be found on the penis, scrotum, urethra, around the anus and rectal areas in men and on the vulva, vagina, cervix, anal and rectal areas in women. HPV can be spread through skin-to-skin contact of infected areas not covered by a condom.

How is Genital HPV Treated?

The goal of HPV treatment is to eradicate actively growing, infectious genital HPV and to prevent spread to uninfected partners. No treatment has been shown to totally eliminate the virus and result in a "cure". Latent virus (inactive, invisible, hidden) remains in most cases and may cause recurrences of active infection.

In most cases the individual's own immune system will eventually suppress the reactivation of latent virus. It is not known whether latent HPV can be transmitted to an uninfected partner, therefore it is important to use condoms consistently even if there is no visible infection.

Treatments for genital HPV exert their effect by destroying infected cells. Available treatments at SHC for external HPV include Podophyllin and liquid nitrogen. Vaginal and cervical infections in women, urethral infections in men, and rectal infections in men and women require referral to a specialist for treatment.

After Treatment, How Do I Know that the Infection is Gone?

Evidence indicates that the HPV infection is often eradicated by the immune system.

The passage of time is the only means of determining if the immune system is suppressing active viral growth. The passage of 1 year without recurrence of genital warts or an abnormal pap test makes it less likely that recurrence from a previous HPV infection will occur. Research indicates that the immune system may take from 9 months to 2 years to control the virus so that spread to another person does not occur. The stronger the immune system, the shorter the time frame. Since most individuals do not know when they encountered the virus it is difficult to tell how long a person may be able to infect someone else.

Human Papilloma Virus (HPV)

Genital Warts

What are the complications of Genital HPV Infection?

Since genital HPV infection is, in almost all cases, a sexually transmitted disease, the risk of infection with other STDs at the time of HPV exposure is increased.

It is important that a person diagnosed with genital HPV infection be tested for other STDs including chlamydia, gonorrhea, syphilis, and HIV infection. Sexual partners of a person diagnosed with genital HPV should also be examined for genital HPV and tested for other STDs.

Some types of HPV cause cancer of the cervix in women. Although only a small percentage of all women infected with HPV develop precancerous changes, it is important that women with a history of genital HPV or a history of exposure have yearly Pap Tests starting at age 21 to screen for these changes. Since genital HPV infection is very common and often difficult to diagnose, we strongly encourage all sexually active women to have yearly Pap Tests starting at age 21. Genital HPV infection does not cause infertility. Pregnancy can, however, cause an increase in the size and number of genital warts.

How can HPV infection be prevented?

The most reliable way of avoiding infection with genital HPV and other STDs is sexual abstinence including skin to skin genital contact. The most effective alternatives are to have a single life-long sexual partner who has not had other sexual partners or any history of intimate skin to skin contact with other partners and to be immunized with the HPV vaccine. It is important to always use a condom **before** any skin-to-skin contact occurs. The female condom provides more protection than the male condom because it covers the female genitalia completely. This prevents any skin to skin contact. The scrotum of the male may be infected with HPV and it is not covered by a male condom. Dental dams may be used for oral sex to prevent direct contact with skin and mucus membranes.

Remember, **there is no test to tell that a sexual partner does not have HPV infection.**

It is also best not to borrow or share used towels, washcloths, razors, underwear or swimsuits from others since they may play a part in the infrequent nonsexual transmission of genital HPV. Genital HPV is not transmitted by toilet seats.

What about the HPV vaccine?

Two vaccines are available to protect females from the most common types of HPV. Both vaccines are designed to protect against the two strains of HPV that cause most cervical cancers. One of the vaccines also includes protection against the two strains of HPV that cause most genital warts. Both vaccines are recommended for females 9-26 years of age. Both vaccines are a series of three injections and the cost is comparable.

The vaccine containing four of the most common types of HPV has been approved for males aged 9-26.

The vaccine is recommended for women who have had an abnormal pap test because it provides protection against additional strains of the virus. The vaccine does not provide protection against any existing strains of HPV but is designed to protect the woman if she encounters another strain of the virus.

What should I do if I have been diagnosed with genital warts?

Don't shave in affected areas until genital warts have completely resolved. Shaving can spread warts quickly. Stop smoking for overall health. Smoking decreases the function of our immune systems which might mean a longer time for recovery. Abstain from sexual skin to skin contact or use consistent and correct protection to prevent spread of the virus to partners. Always discuss your sexual history with partners so they may be included in the decision of whether or not to have sex and what type of protection should be used.