

## ***Genital Warts or HPV (Human Papillomavirus)***

### ***What is genital HPV infection?***

Genital HPV infection is a sexually transmitted disease (STD) that is caused by human papillomavirus (HPV). Human papillomavirus is the name of a group of viruses that includes more than 100 different types. More than 30 of these viruses are sexually transmitted, and they can infect the genital area of men and women including the skin of the penis, vulva (area outside the vagina), or anus, and the linings of the vagina, cervix, or rectum. These HPV types can also infect the mouth and throat. Most people who become infected with HPV will not have any symptoms and will clear the infection on their own.

Some of these viruses are called “high-risk” types, and may cause abnormal Pap tests. They may also lead to cancer of the cervix, vulva, vagina, anus, or penis. Others are called “low-risk” types, and they may cause mild Pap test abnormalities or genital warts. Genital warts are single or multiple growths or bumps that appear in the genital area, and sometimes are cauliflower-shaped.

HPV is not the same as herpes or HIV (the virus that causes AIDS). These are all viruses that can be passed on during sex, but they cause different symptoms and health problems.

### ***How common is HPV?***

Approximately 20 million Americans are currently infected with HPV. At least 50 percent of sexually active men and women acquire genital HPV infection at some point in their lives. By age 50, at least 80 percent of women will have acquired genital HPV infection. About 6.2 million Americans get a new genital HPV infection each year.

### ***How do people get genital HPV infections?***

The types of HPV that infect the genital area are spread most often through genital contact. Most HPV infections have no signs or symptoms; most infected persons are unaware they are infected, yet they can transmit the virus to a sex partner. Rarely, a pregnant woman can pass HPV to her baby during vaginal delivery. A baby that is exposed to HPV very rarely develops warts in the throat or voice box.

### ***What are the signs and symptoms of genital HPV infection?***

Most people who have a genital HPV infection do not know they are infected. The virus lives in the skin or mucous membranes and usually causes no symptoms. Some people get visible genital warts, or have pre-cancerous changes in the cervix, vulva, anus, or penis. Very rarely, HPV infection results in anal or genital cancers.

Genital warts usually appear as soft, moist, pink, or flesh-colored swellings, usually in the genital area. They can be raised or flat, single or multiple, small or large, and sometimes cauliflower-shaped. They can appear on the vulva, in or around the vagina or anus, on the cervix, and on the penis, scrotum, groin, or thigh. After sexual contact with an infected person, warts may appear within weeks, months, or not at all.

Genital warts are diagnosed by visual inspection. Visible genital warts can be removed by patient applied medications such as Podofilox and Imiquimod or by treatments performed by a health care provider known as cryosurgery or by applying a weak acid solution. Some individuals choose to forego treatment to see if the warts will disappear on their own. No treatment regimen for genital warts is better than another and no one course of therapy is ideal for all cases.

### *How is genital HPV infection diagnosed?*

Most women are diagnosed with HPV on the basis of abnormal Pap tests. A Pap test is the primary cancer-screening tool for cervical cancer or pre-cancerous changes in the cervix, many of which are related to HPV. Also, a specific test is available to detect HPV DNA in women. The test may be used in women with mild Pap test abnormalities, or in women older than 30 years of age at the time of Pap testing. The results of HPV DNA testing can help health care providers decide if further tests or treatment are necessary. No HPV tests are available for men at this time.

### *Is there a cure for HPV?*

There is no “cure” for HPV infection, although in most women the infection goes away on its own. The treatments provided are directed to the changes in the skin or mucous membrane caused by HPV infection, such as warts and pre-cancerous changes in the cervix.

### *What is the connection between HPV infection and cervical cancer?*

All types of HPV can cause mild Pap test abnormalities which do not have serious consequences. Approximately 10 of the 30 identified genital HPV types or “high-risk” types can lead to the development of cervical cancer. Research has shown that for most women (90 percent), cervical HPV infection becomes undetectable within two years. Although only a small proportion of women have persistent infection, persistent infection with “high-risk” types of HPV is the main risk factor for cervical cancer.

A Pap test can detect pre-cancerous and cancerous cells on the cervix. Regular Pap testing and careful medical follow-up, with treatment if necessary, can help ensure that pre-cancerous changes in the cervix caused by HPV infection do not develop into life threatening cervical cancer. The Pap test used in U.S. cervical cancer screening programs is responsible for greatly reducing deaths from cervical cancer. Most women who develop invasive cervical cancer have not had regular cervical cancer screening.

### *How can I reduce my risk for genital HPV infection?*

The surest way to eliminate risk for genital HPV infection is to refrain from any genital contact with another individual. There are several ways that people can lower their chances of getting HPV:

- Vaccines can protect males and females against some of the most common types of HPV. These vaccines are given in three shots. It is important to get all three doses to get the best protection. The vaccines are most effective when given before a person's first sexual contact, when he or she could be exposed to HPV.
  - **Girls and women:** Two vaccines (Cervarix and Gardasil) are available to protect females against the types of HPV that cause most cervical cancers. One of these vaccines (Gardasil) also protects against most genital warts. Both vaccines are recommended for 11 and 12 year-old girls, and for females 13 through 26 years of age, who did not get any or all of the shots when they were younger. These vaccines can also be given to girls as young as 9 years of age. It is recommended that females get the same vaccine brand for all three doses, whenever possible.
  - **Boys and men:** One available vaccine (Gardasil) protects males against most genital warts. This vaccine is available for boys and men, 9 through 26 years of age.

For those who choose to be sexually active, a long-term, mutually monogamous relationship with an uninfected partner is the most likely to prevent future genital HPV infections. However, it is difficult to determine whether a partner who has been sexually active in the past is currently infected.

For those choosing to be sexually active and who are not in long-term mutually monogamous relationships, reducing the number of sexual partners and choosing a partner less likely to be infected may reduce the risk of genital HPV infection. Partners less likely to be infected include those who have had no or few prior sex partners.

HPV infection can occur in both male and female genital areas that are covered or protected by a latex condom, as well as in areas that are not covered. While the effect of condoms in preventing HPV infection is unknown, condom use has been associated with a lower rate of cervical cancer, an HPV-associated disease.

**For more information about STDs, talk to your health care provider or call:**

**The State of Tennessee HIV/STD Hotline: 1-800-525-2437**

**(Monday through Friday 8:00 to 4:30 p.m. CST)**

**OR**

**The CDC National STD Hotline: 1-800-227-8922**

**Other Informational Links:**

**American Social Health Association**

<http://www.ashastd.org/>

**Centers for Disease Control and Prevention**

<http://www.cdc.gov/STD/>

**E-Cards, Centers for Disease Control and Prevention**

<http://www2c.cdc.gov/ecards/index.asp?category=174>

**Get Yourself Tested**

<http://www.gytnow.org/>

**National Institute of Health Medline**

<http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html>

**U.S. Department of Health and Human Services**

<http://www.womenshealth.gov/fag/sexually-transmitted-infections.cfm>

**World Health Organization**

[http://www.who.int/topics/sexually\\_transmitted\\_infections/en/](http://www.who.int/topics/sexually_transmitted_infections/en/)