

Education

Human Papillomavirus (HPV): Genital Infection

What is human papillomavirus?

Human papillomaviruses (HPVs) are a group of over 100 viruses. There are many types of HPV, including types that infect the genital area and some that cause genital warts. Some types of HPV infection can develop into cancer if not treated.

HPV infection is a common sexually transmitted disease. At least 50% of sexually active people will have genital HPV at some time in their lives.

HPV can cause changes in a woman's cervix. Most of the time these changes are harmless, but sometimes the changes may cause cervical cancer.

How does it occur?

Some types of HPV infection can develop without sexual relations, but often HPV is passed from one person to another during sexual activity.

Several types of HPV cause genital warts. Genital warts are usually found around or in the penis, rectum, vagina, or cervix (the lower part of the uterus). They may spread to other nearby parts of the body. You may get warts in your mouth if you have had oral sexual contact with an infected person. The types of virus that most often cause genital warts are called HPV-6 and HPV-11.

You are more likely to have sexually transmitted HPV if:

- You have had more than 1 sex partner.
- Your sex partner has been sexually active with other partners.
- You had sexual intercourse before the age of 18.
- You have had other sexually transmitted diseases (STDs).
- Your immune system (which helps the body fight infections) is not working well because of cancer treatment (chemotherapy), immune-suppressing drugs (for transplants or autoimmune diseases), or an immune-suppressing infection, such as HIV
- You have had long-term steroid use.
- You have lupus.
- You smoke cigarettes, because smoking affects your ability to fight infection.

Sexually abused girls and boys have a higher risk of HPV infection.

What are the symptoms?

Usually there are no symptoms. In other cases growths that you can feel (warts) may appear in the genital or rectal area within several weeks, months, or years after contact with an infected person. Genital warts are similar to common warts. Genital warts are flesh-colored, grayish white, or pinkish white. They usually appear as thin, flexible, solid bumps on the skin that look like small pieces of cauliflower. Some warts, however, are small and flat and may not be easily noticed.

Other symptoms of genital HPV infection are:

- a foul smell, mild irritation, burning, itching, or pain in the vulva or vagina
- pain with intercourse
- increased vaginal discharge
- bleeding (from injury to warts after sexual intercourse).

How is it diagnosed?

Your health care provider will ask about your symptoms and examine your genital area, as well as the anus and surrounding

skin. Your provider may put a liquid on the skin to make it easier to see the wart. He or she may use a magnifying instrument, or scope, to look closely at your genitals. Your provider may do a biopsy, removing a sample of tissue for lab tests.

If you are a woman, you will have a pelvic exam. Often HPV is discovered when a Pap test is done. If the results of a Pap test are abnormal, you may have further tests to see if HPV is the reason for the abnormal Pap test. There is also a DNA test that can be done to see if the type of HPV you have is the type associated with cervical cancer.

How is it treated?

There is no cure for HPV itself, but a healthy immune system can usually fight the virus off on its own. There are treatments for the health problems that genital HPV can cause, such as genital warts, cervical cell changes, and cervical cancer.

There are several ways to treat HPV. Your health care provider will discuss your treatment choices with you. Usually the treatment is done in the provider's office. Possible treatments are:

- medicines that are put on the site of the HPV infection
- cryotherapy: freezing of the warts with liquid nitrogen
- laser treatment: a high-intensity light beam used to destroy the infection
- electrosurgery: an electric current used to burn or remove the infection with a wire loop
- surgery: cutting away the growths or infection.

You may need a local anesthetic to numb the area before some of these treatments.

Removal of the warts does not get rid of the virus. Because you will still have the virus after treatment, the warts could come back. Genital warts that persist or come back after standard treatment may be treated with shots of interferon. Interferon is a medicine that boosts the body's immune response and helps keep viruses from multiplying.

How long will the effects last?

Treatment can remove the warts, but it will not get rid of the virus. As a result, the warts may come back and you may need more treatments.

Genital HPV does not cause health problems for most people. However, some types of HPV are related to the development of cancer of the cervix, vagina, or vulva in women.

The HPV-6 and HPV-11 types of virus, which are the usual cause of genital warts, rarely lead to cancer and are called low-risk HPVs. HPVs that are more likely to lead to the development of cancer are referred to as "high-risk." Sexually transmitted, high-risk HPVs include types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 69, and possibly a few others. The high-risk types of HPVs cause growths that are usually flat and nearly invisible, as compared with the warts caused by types HPV-6 and HPV-11.

Because some types of HPV can cause precancerous or cancerous changes in the cervix, it is important for women who have had HPV infection to have regular Pap tests to check for abnormal cells. Cervical cancer is highly preventable with regular Pap tests and follow-up.

Many HPV infections, even when they are caused by viruses called high risk, go away on their own and do not cause cancer, especially in women under the age of 30.

How can I take care of myself?

- Avoid sexual contact if you or your partner has HPV infection until you have completed your treatment and the warts have completely healed.
- Get follow-up exams according to your health care provider's recommendations. Women should have pelvic exams and Pap tests as often as their provider recommends.
- If you have an unusual vaginal discharge or irritation, or if you notice growths in the genital area, see your provider.
- If you have an abnormal Pap test, follow your provider's advice for tests and treatment.
- If you plan to get pregnant and have genital warts or an abnormal Pap test caused by HPV, get treatment before you get pregnant.

How can I help prevent HPV or its complications?

Abstaining from all sexual contact is the best way to prevent getting HPV.

Researchers have developed a vaccine called Gardasil to prevent certain types of HPV infections that are high risk for cancer of the cervix and warts. The vaccine has recently been approved for use by the FDA. If you already have HPV, a shot of the vaccine will not cure your infection, but it can help keep you from getting infected with some other types of HPV.

The Gardasil shot is given to females 9 to 26 years old before they get HPV. It is given in 3 doses within a period of 6 months. Gardasil can protect you from HPV for 5 years. Researchers are doing studies to see if a booster shot after 5 years is needed.

Gardasil is usually not given to pregnant women.

Here are some other things you can do to help prevent HPV or its complications:

- Do not have sexual intercourse until you are married or over the age of 18.
- Use latex or polyurethane condoms during sex. Condoms can reduce your risk of getting genital warts, but warts can spread from areas not covered by a condom.
- Have just one sexual partner who is not sexually active with anyone else.
- Avoid sexual contact until the genital warts or HPV is completely treated and healed.
- Avoid smoking. Studies show that smoking increases the risks and problems related to HPV infection.

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