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# Human Papillomavirus (HPV) and Genital Warts

**Q: What is human papillomavirus (HPV)?**

**A:** Human papillomavirus (pronounced pap-ih-lo-ma-vye-rus) is also called HPV. It is a virus that includes more than 100 types, over 30 of which are sexually transmitted. The types of HPV that infect the genital area are known as genital HPV. Most sexually active people will have HPV at some point in their lives, though most will never know it because it usually has no symptoms and goes away on its own. Genital HPV types are either low-risk or high-risk types. This does not have to do with the risk of getting the infection. It is about the risk of getting cervical cancer.

**Q: How many people have HPV?**

**A:** Genital HPV is the most common sexually transmitted disease in the United States. At least 50 percent of sexually active men and women get genital HPV at some time in their lives.

**Q: What is the difference between the high-risk and low-risk types of HPV?**

**A:** Both high-risk and low-risk types of genital HPV can cause changes or

growths on the tissue of a woman's cervix. The cervix is part of the uterus that opens to the vagina. Growths are usually flat and invisible.

- High-risk types can cause cell changes that can lead to cervical cancer over time, if those cell changes are left untreated. Having high-risk HPV is not the same as having cervical cancer. Usually, these high-risk HPV types cause no health problems at all and go away on their own. Persistent high-risk HPV (infection that does not go away) is the most important risk factor for cervical cancer. The good news is that cervical cell changes can be found with regular Pap tests, and treated to prevent cervical cancer from ever developing.
- Low-risk types of HPV can cause genital warts, but do not cause cervical cancer. Warts can form weeks, months, or years after sexual contact with a person who has genital HPV. Genital warts can grow inside and around the outside of the vagina, on the vulva ("lips" or opening to the vagina) and cervix, groin and in or around the anus. In men, genital warts can grow on the penis, scrotum, thigh, groin, or in or around the anus. While very rare, genital warts can grow in the mouth or throat of a person who has had oral sex with an infected person. The size of genital warts varies and some may be so small, you can't see them with your eyes. They can be flat and flesh-colored or look bumpy like cauliflower. They often occur in clusters or groups. They may cause itching, burning, and discomfort. It's also possible that warts may never appear. In fact, most people



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with low-risk types of genital HPV never know they are infected because they don't get warts or any other symptom.

**Q: How do women get HPV?**

**A:** Genital HPV is passed by skin-to-skin and genital contact, primarily during vaginal and anal intercourse. It might also be possible to pass it during oral sex.

**Q: How do I know if I have an HPV infection?**

**A:** A Pap test can find changes on the cervix, caused by an HPV infection. To do a Pap test, your doctor will use a small brush to take cells from your cervix. It's simple and fast and the best way to find out if your cervix is healthy.

If you're age 30 or older, your doctor may also do an HPV test with your Pap test. This is a DNA test that detects most of the high-risk types of HPV and is a test to help with cervical cancer screening. If you're younger than 30 years old and have had a borderline (ASC-US) Pap test result, your doctor may give you an HPV test. This test will tell you if HPV caused the abnormal cells on your cervix.

Another way to tell if you have an HPV infection is if you have genital warts. Genital warts can grow inside and around the outside of the vagina, on the vulva ("lips" or opening to the vagina) and cervix, groin and in or around the anus. In men, genital warts can grow on the penis, scrotum, thigh, groin, or in or around the anus. Most of the time, people who have HPV infections never know they have it.

**Q: How often should I get a Pap test?**

Follow these guidelines:

- Begin getting Pap tests every one to three years if you have been sexually active or are older than age 21. Talk to your doctor about when and how often to get a Pap test.
- If you are older than 65 years and have had normal Pap tests and are not at risk for cervical cancer, you may be able to stop getting Pap tests. Talk to your doctor or nurse about what is best for you.
- If you had a total hysterectomy (removal of the uterus and cervix), you do not need to get a Pap test if the hysterectomy was done for a noncancerous condition.
- Some experts differ on how often women need Pap tests. Talk to your doctor or nurse to find out when you should begin testing, how often you should be tested, and when you can stop.

**Q: What happens if I have an abnormal test?**

**A:** If your Pap test doesn't come back as normal, your doctor may tell you that you have an "abnormal" Pap test. An abnormal result does **NOT** mean you have HPV or cervical cancer. There could be many other reasons for an abnormal Pap test result, such as a yeast infection, irritation, or hormone changes. If your Pap test is abnormal, your doctor may repeat the Pap test, do an HPV test, have a follow-up later, or do the following tests:

- **Colposcopy.** A device is used to look closely at your cervix to get a better look at the abnormal areas.



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- **Schiller test.** The test involves coating the cervix with an iodine solution. Healthy cells turn brown and abnormal cells turn white or yellow.
- **Biopsy.** A small amount of cervical tissue is removed and looked at under a microscope to figure out if abnormal cells have cancer.

**Q: Is it still possible to have HPV even if my Pap test was normal?**

**A:** Yes. You can have HPV but still have a normal Pap test. Changes on your cervix may not appear right away or they may never appear. For women over the age of 30 that get an HPV test and a Pap test, a negative result on both the Pap and HPV tests means that no cervical changes or HPV was found on the cervix. This is great news, because it means there is an extremely low chance of developing cervical cancer in the next few years.

**Q: Can HPV be treated?**

**A:** No. There is no treatment or cure for HPV. However, there is treatment for the changes that HPV can cause on the cervix, as well as treatment for genital warts.

**Q: What treatments are used to get rid of abnormal cells on the cervix?**

**A:** If you have abnormal cells on the cervix, it is very important to follow up with your doctor. If the problem is mild, your doctor may want to closely watch your condition to see if the cells heal on their own. Or your doctor may recommend removing the abnormal tissue. These are the treatment options:

- **Cryosurgery.** Abnormal tissue is frozen off.
- **Loop electrosurgical excision procedure (LEEP).** Tissue is removed using a hot wire loop.
- **Laser treatment.** A beam of light destroys the abnormal tissue.
- **Cone biopsy.** A cone-shaped sample of tissue is removed from the cervix.

After these treatments, you may have vaginal bleeding, cramping, a brownish-black discharge, or a watery discharge. Even after treatment, it is important to follow up as recommended, to make sure the abnormalities do not come back.

**Q: How are genital warts treated?**

**A:** Genital warts can be treated or not treated. Some people may want warts removed if they cause itching, burning, and discomfort. Others may want to clear up visible warts. If you decide to have warts removed, do **NOT** use over-the-counter medicines meant for other kinds of warts. There are special treatments for genital warts. Your doctor may treat genital warts by applying a chemical in the office. Or your doctor may prescribe a cream that you apply at home. Surgery is also an option. Surgical treatments include:

- **Electrocautery.** An electric current is used to burn off the warts.
- **Laser treatment.** Light is used to destroy warts.
- **Cryosurgery.** Warts are frozen off.
- **Cutting them out.**

Even after the warts are treated, the virus (genital HPV) may remain, and warts can return. For this reason, it is



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not clear if treating the genital warts lowers a person's chance of giving the virus (genital HPV) to a sex partner or not. If left untreated, genital warts may go away, remain unchanged, or increase in size or number. They will not turn into cancer. It is not fully known why low-risk HPV causes genital warts in some cases and not in others.

**Q: What about HPV in men?**

**A:** HPV is just as common in men as in women. Fortunately, HPV rarely causes serious health problems in men, with the exception of anal cancer in men who have sex with men. There is no test for HPV in men.

**Q: How do I protect myself from HPV?**

**A:** HPV infection can infect male and female genital areas that are covered by a condom, as well as areas not covered by the condom. Using condoms may reduce the risk of getting genital warts and cervical cancer. But condoms may not completely protect you. The best way to protect yourself from HPV is to not have sex, or to only have sex with one uninfected partner who also only has sex with you.

**Q: If I had HPV that went away on its own, can I get it again?**

**A:** Yes. There are many types of HPV, and it is possible to get HPV again.

**Q: How do I protect my partner from HPV after my warts have disappeared?**

**A:** Even if you think the warts have disappeared, you may still have a wart or

warts you can't see. Even after the warts are treated, the virus, HPV, may remain. Using condoms may reduce your risk of passing on genital warts, which are caused by HPV.

**Q: How does HPV affect a pregnancy?**

**A:** Women who had genital warts in the past, but no longer have them, will most likely not have any problems during pregnancy or birth. However, for women who have genital warts during pregnancy, the warts may grow, or may become larger and bleed. In rare cases, 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.

If the warts block the birth canal, a woman may need to have a cesarean-section (C-section) delivery. However, HPV infection or genital warts are not a sole reason for C-section.

**Q: How can I be sure that I don't get cervical cancer?**

**A:** Other factors, in addition to having HPV, can raise the risk of developing cervical cancer. Some of these factors are not getting Pap tests, smoking, and having a weakened immune system. Take these steps to prevent cervical cancer:

- **Get regular Pap tests.** The best time to get a Pap test is between 10 and 20 days after the first day of your last period. Do not have the test done when you have your period. Don't have sex or use douches, vaginal medicines (unless your doctor tells you to), spermicide foams,



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- creams, or jellies two days before your Pap test. Talk to your doctor about how often to get Pap tests.
- **Eat a healthy, balanced diet with delicious fruits and vegetables.** In particular, carotene and vitamins C and E may reduce the risk of cervical and other cancers. Carotene is found in tomatoes, carrots, sweet potatoes, and broccoli. You can get vitamin C by eating fruits, especially citrus fruits, and vegetables. The darker the color of the fruit or vegetable, the more vitamin C. Load up on oranges, green and red peppers, broccoli, papayas, and strawberries. Good sources of vitamin E include oils such as safflower and corn, wheat germ, and sunflower seeds

and nuts, such as almonds, peanuts, and hazelnuts.

- **Don't smoke.** Smoking can raise your risk of cervical cancer.
- **Be faithful.** Be faithful to your partner, meaning that you only have sex with each other and no one else.
- **Protect yourself with a condom EVERY time you have vaginal, anal, or oral sex.** HPV infection can infect male and female genital areas that are covered by a condom, as well as areas not covered by the condom. Using condoms may reduce the risk of getting genital warts and cervical cancer. But condoms may not completely protect you. ■



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*For More Information . . .*

You can find out more about human papillomavirus by contacting the National Women's Health Information Center (NWHIC) at 1-800-994-9662 or the following organizations:

**National Cancer Institute**

Human Papillomavirus (HPV) Vaccines for Cervical Cancer  
 Phone: (800) 422-6237  
 Internet Address: <http://www.cancer.gov/cancertopics/hpv-vaccines>

**CDC HPV Web Site, HHS**

Internet Address:  
<http://www.cdc.gov/std/hpv>

**CDC Info, HHS**

Phone: (800) CDC-INFO or (800) 232-4636

**CDC National Prevention Information Network (NPIN), NCH-STP, CDC, HHS**

Phone: (800) 458-5231  
 Internet address: <http://www.cdcpin.org>

**National Breast and Cervical Cancer Early Detection Program**

Phone: (888) 842-6355  
 Internet address:  
[www.cdc.gov/cancer/nbccedp](http://www.cdc.gov/cancer/nbccedp)

**National Cancer Institute**

Phone: (800) 4-CANCER (800-422-6237)  
 Internet address: [www.cancer.gov/cancerinfo/types/cervical](http://www.cancer.gov/cancerinfo/types/cervical)

**National Institute of Allergy and Infectious Diseases (NIAID), NIH, HHS**

Phone: (301) 496-5717  
 Internet Address: <http://www.niaid.nih.gov/publications/stds.htm>

**American Cancer Society**

Phone: (800) ACS-2345  
 Internet address: [www.cancer.org](http://www.cancer.org)

**American Social Health Association**

Phone: (877) HPV-5868  
 Internet address:  
<http://www.ashastd.org/hpvcrc>

**Association of Reproductive Health Professionals**

Phone: (202) 466-3825  
 Internet address: <http://www.arhp.org>

**National Cervical Cancer Coalition (NCCC)**

Phone: (800) 685-5531  
 Internet address:  
<http://www.nccc-online.org>

The human papillomavirus and genital warts FAQ was reviewed by the Division of STD Prevention, Centers for Disease Control and Prevention.

June 2006