
For Teens: Understanding HPV

Human papillomavirus (HPV) is a virus that causes warts. HPV is passed from person to person through contact with infected skin and through sexual contact. It can be hard to find. Many people never even know they have it. There are several types (strains) of HPV. Many strains don't cause problems. But some strains may cause warts on the skin of the hands, legs, feet, or other parts of the body. Other strains of HPV cause warts in the genital area. Of these, a few strains can lead to certain cancers:

- Cancers of the cervix, vagina, and vulva
- Cancers of the penis
- Cancers of the anus and back of the throat in all genders

HPV infections are so common that almost all men and women will get at least 1 type of HPV at some point in their life. A vaccine is advised to prevent the HPV virus and protect against certain types of cancer caused by HPV. Once picked up, HPV infections can't be cured. But there are treatments to remove warts and precancerous or cancerous areas caused by HPV. It's important to treat genital forms of HPV to prevent serious health problems in the future.

What to look for

Some types of HPV cause warts. Others don't. You can also have more than 1 type of HPV at a time. Here are some things to look out for:

- Painless lumps or bumps. Warts may be bumpy, cauliflower-shaped, or flat. They can appear in or around the genitals or anus.
- In women, an abnormal cervical or anal Pap smear. In men, an abnormal anal Pap smear. Over time, HPV can cause abnormal cell changes (dysplasia) on the cervix or in the anus. These increase your chances of getting cervical or anal cancer. If you have an abnormal Pap smear, you may need a follow-up test to look for HPV. Men and women who have anal sex are especially at risk for anal HPV and anal dysplasia and cancer, but others can get these too.

How warts form

HPV lives inside skin and mucous membrane, including in the mouth and vagina. The virus can make skin cells reproduce more often than they should. These extra skin cells build up into warts.

1. HPV invades the skin.
2. DNA from the virus enters skin cells.
3. HPV causes infected skin cells to multiply and form warts.
4. The virus sheds, allowing it to be passed to others.

Prevention

You can do several things to lower your chances of getting HPV:

- **Get vaccinated.** An HPV vaccine helps protect both men and women from the types of HPV that are most likely to lead to cancer. The vaccine also greatly reduces the chance of developing warts. Most children should get the HPV vaccine around age 11 to 12. It can be given as early as age 9. The vaccine is given in 2 doses, with the second dose 6 to 12 months after the first. Teens ages 15 and older and young adults up to age 26 who missed getting the vaccine should get a 3-dose series. The second dose is given 1 to 2 months after the first dose, and third dose 6 months after the first. The FDA has approved the HPV vaccine up to age 45. If you are age 27 to 45 and have not yet gotten the HPV vaccine, talk to your healthcare provider about whether the HPV vaccine could benefit you.
- **Get Pap tests.** Women should start regular cervical cancer screening through Pap tests at age 21. A cervical Pap test may be recommended as frequently as every year, or every 3 or 5 years in some cases. A cervical HPV test may be done instead of or in addition to a Pap smear for some women. Your medical provider can advise you on how often to have a Pap test and whether to have a Pap, HPV test, or both. If you have anal sex, talk with your healthcare provider to see if anal Pap testing is recommended for you.
- **Practice safe sex.** The only sure way to prevent genital warts is not having any kind of sex (abstinence). But if you do decide to have sex, take steps to protect yourself:
 - If you have sex, always use a latex condom. But remember that HPV can infect areas not covered by condoms. This means condoms may not always protect against HPV.
 - Have sex only with 1 person who has sex only with you. This is called mutually monogamous.
 - Talk to your partner about testing.
- **Find out more.** If you're concerned about HPV, talk with your healthcare provider, school nurse, campus clinic, or local health department about testing.

Treatment

Warts can be treated with medicine that you apply yourself. Or they can be removed by a healthcare provider. But the virus stays in the body. Both males and females can pass on HPV even when warts aren't visible. If you have an abnormal Pap smear, you may need other tests or treatments. Regular checkups can help make sure the area remains healthy and free of cancer.

If you don't get treated

HPV can cause cell changes that increase the chance of getting cervical or anal cancer. This health problem can sometimes cause death. If you are sexually active, you may need to be screened for cervical or anal cancer by having a Pap test and an HPV test. It's recommended women have a Pap test at age 21. Anal Pap tests are less commonly done. They are not usually advised until a person is older. A Pap test can help spot warning signs of cancer early on when treatments work best. Discuss cervical and anal cancer screening guidelines and tests with your healthcare provider.

HPV can also cause penile, mouth, and head and neck cancers.