



Patient education: Human papillomavirus (HPV) (The Basics)

Written by the doctors and editors at UpToDate

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What is human papillomavirus?

Human papillomavirus, or "HPV," is a virus that can cause skin warts, genital warts, and some forms of cancer.

There are many types of HPV. Different types can cause different health problems. This article is about the types of HPV that can be spread through sex.

How can people get infected with HPV?

People can get infected with HPV if their mouth or genitals touch the genitals of someone who is infected. This mainly happens through oral, vaginal, or anal sex. But HPV can also be spread through close genital-to-genital contact, even without having sex.

People who have had a lot of sex partners have a higher chance of getting an HPV infection. Many people with HPV do not know they have it. So it is easy to spread to partners without realizing it.

What are the symptoms of an HPV infection?

Some types of HPV cause genital warts. But many people do not have any symptoms. Often, the infection gets better on its own. But in some people, the infection doesn't go away. If this happens, it can lead to problems.

What are the risks of HPV infection?

People with long-lasting HPV infection have a higher chance of getting other health problems. Different types of HPV can cause different problems, some of which can be serious. For example:

- An HPV infection in the genitals can cause cancer of the cervix (cervical cancer), vagina (vaginal cancer), or penis (penile cancer). Other types of HPV can cause genital warts.
- An HPV infection around the anus can cause cancer of the anus (anal cancer).
- An HPV infection in the mouth and throat can cause cancer of the mouth and throat.

These problems usually happen many years after a person is first infected.

Is there a test for HPV?

There are tests for some types, but not others. If your doctor confirms you have genital warts, this means you have an HPV infection. This is not the same type of HPV that can lead to cancer.

Doctors recommend females be screened for cervical cancer. This usually involves getting regular Pap tests (sometimes called "Pap smears") starting at age 21. They can also test for HPV at this time. Sometimes, HPV testing alone is used to screen for cervical cancer.

Some experts recommend certain people also be screened for anal cancer. When to start and how often to get these tests depend on several things. Talk to your doctor or nurse about whether you should be screened for anal cancer.

There are no tests to check for genital HPV infection in males, or for HPV infection in the mouth or throat.

How is HPV infection treated?

Once you have HPV, it cannot be cured.

If HPV infection leads to a more serious problem, your doctor can talk to you about your treatment options.

Can HPV be prevented?

Yes. For most people, the best way to protect against HPV is to get the HPV vaccine. It only works if it is given **before** you get infected with HPV. This is why doctors suggest getting it at a young age. Doctors recommend children aged 11 to 12 get the vaccine. But it can be given as early as age 9 and up to age 26. In some cases, the vaccine might help older people, too.

The vaccine is very good at preventing the types of HPV infection that can cause cervical and vaginal cancer. It might lower the risk of other types of cancer, too. The vaccine is also very good at preventing the types of HPV that cause genital warts.

The vaccine is not perfect. In some cases, people who get it can still get an HPV infection. But it is still the best way to lower the risk of HPV.

Condoms and dental dams do **not** completely protect against HPV. That's because the virus can live on skin that is not covered by a condom or dental dam. But these are still important ways to protect yourself against other diseases that can be spread through sex.

When should I call the doctor?

Call your doctor or nurse if:

- You have certain symptoms on your lips or tongue, inside your mouth, or in your genital area. (The genital area includes the vagina, penis, scrotum, anus, butt, and thighs.) These include:
 - New or unusual bleeding, including bleeding after sex
 - A bump or ulcer
 - A rash, white patch, or itchiness
- You have ear or throat pain that does not go away.
- You have a lump in your neck.

- Your voice or hearing changes – This includes having a hoarse voice, hearing loss, or ringing in the ears.
- You have trouble swallowing.

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