

## Human Papillomavirus (HPV) Infection

### What is human papillomavirus (HPV)?

- Human papillomavirus (HPV) is a virus that can be passed from person to person through skin-to-skin contact.
- More than 100 types of HPV have been found.
- About 30 of these types infect the genital areas of men and women and are spread from person to person through sexual contact.

### How common is HPV?

HPV is a very common virus. Some research suggests that at least three out of four people who have sex will get a genital HPV infection at some time during their lives.

### How is HPV infection spread?

- HPV is primarily spread through vaginal, anal, or oral sex, but sexual intercourse is not required for infection to occur.
- HPV is spread by skin-to-skin contact.
- Sexual contact with an infected partner, regardless of the sex of the partner, is the most common way the virus is spread.
- Like many other sexually transmitted diseases, there often are no signs or symptoms of genital HPV infection.

### What diseases does HPV infection cause?

GENITAL WARTS: Approximately 12 types of HPV cause genital warts. These growths may appear on the outside or inside of the vagina or on the penis and can spread to nearby skin. Genital warts also can grow around the anus, on the vulva, or on the cervix.

HIGH RISK.CANCER: Approximately 15 types of HPV are linked to cancer of the anus, cervix, vulva, vagina, and penis. They also can cause cancer of the head and neck. These types are known as "high-risk types."

### How does HPV cause cancer of the cervix?

The cervix is covered by a thin layer of tissue made up of cells. If HPV is present, it may enter these cells. Infected cells may become abnormal or damaged and begin to grow differently. The changes in these cells may progress to what is known as precancer.

Changes in the thin tissue covering the cervix are called dysplasia or cervical intraepithelial neoplasia (CIN). In most women, the immune system destroys the virus before it causes cancer. But in some women, HPV is not destroyed by the immune system and does not go away. In these cases, HPV can lead to cancer or, more commonly, precancer.

## Are there screening tests for cervical cancer?

It usually takes years for cervical cancer to develop. During this time, HPV infection can cause cells on or around the cervix to become abnormal. A **Pap test**, sometimes called cervical cytology screening, can detect early signs of abnormal cell changes of the cervix and allows early treatment so they do not become cancer. An HPV test also is available. It is used along with the Pap test in women 30 years and older and as a follow-up test for women whose Pap tests show abnormal or uncertain results.

The HPV test can identify 13-14 of the high-risk types of HPV.

## Can HPV infection be prevented?

Two vaccines are available that protect against certain types of HPV. The following methods also help decrease the chance of infection:

- Limit your number of sexual partners.
- Use condoms to reduce your risk of infection when you have vaginal, anal, or oral sex.

Condoms cannot fully protect you against HPV infection. HPV can be passed from person to person by touching infected areas not covered by a condom. These areas may include skin in the genital or anal areas. Female condoms cover more skin and may provide a little more protection than male condoms.