

HPV and Abnormal Pap Test

Brown Health Services Patient Education Series

What is HPV?

Human papillomavirus (HPV) is a type of virus that causes abnormal tissue growth such as skin warts, genital warts and some kinds of cancer. HPV can play a role in development of cervical, anal, vaginal, vulvar, penile, and oropharyngeal cancers.

There are more than 120 different types of HPV but only 40 types can infect the genital tract.

- Two types (types 6 and 11) are associated with the development of genital warts and low grade lesions of the cervix, but are not associated with cancer.
- Sixteen types are high risk, and may be factors in the development of cancer
- Types 16 and 18 are responsible for 70% of cervical cancer.
- The HPV vaccine covers the most problematic HPV types, and is nearly 100% effective in preventing the covered types.

How common is HPV?

HPV is the most prevalent sexually transmitted infection (STI). The lifetime risk of acquiring this infection is 75% for sexually active adults.

How is HPV transmitted?

HPV is transmitted through direct skin-to-skin contact, not via body fluids. Vaginal intercourse or receptive anal intercourse are the highest risk activities, but skin-to-skin genital contact, or oral/genital contact may also transmit the virus. The virus does not survive long on inanimate objects, but it can be spread in the short-term via use of sex toys. Because the virus is transmitted by skin-to-skin contact, condoms do not completely prevent

infection, as they might not cover all areas infected with HPV.

What is the natural history of HPV infection?

HPV is an infection which many people will contract, but only a small number of those people will have a lasting infection leading to cancer. This is because, in most cases, HPV- whether low or high risk types- is cleared by the immune system. The average time of infection is 4 to 20 months. Progression to pre-cancer occurs when infection with high-risk types persists over time. Infection with high-risk HPV types is a necessary, but generally not a single or sufficient, cause of cancer. Other factors which may contribute to developing cancer include smoking, nutritional status, health of the immune system (e.g., HIV infection or taking medications that suppress the immune system), and oral contraceptive use.

Key Points to Remember about HPV:

- The primary risk factor for HPV infection is sexual activity. Virtually any person who has engaged in sexual activity is likely to have been exposed to HPV.
- HPV is very common. Most people who have been sexually active have had HPV, but most will never have cancer.
- HPV is spread through close contact of genital skin, usually during vaginal or anal intercourse. HPV can be transmitted with non-penetrative sexual activity.
- HPV infection usually causes no symptoms, and most people never know they are infected.
- It may not be possible to know who gave you HPV or when you got it.

- Condom use reduces but does not completely prevent the spread of HPV.
- People who have same-sex partners can also be infected by HPV.
- The body often clears HPV infection on its own.

Understanding HPV and your Pap results

The Pap test (also known as the Pap smear) is a simple and effective way of checking for cells in your cervix that are abnormal and potentially cancer causing. Cervical cancer, most often triggered by human papillomavirus (HPV), is preventable by early detection and treatment of worrisome or abnormal cells. The pap test is a screening test, not a diagnostic test. It gives us information we can use to determine which people need further evaluation.

What Do My Pap Test Results Mean?

Pap tests are generally performed on people who are 21 and older. Your Pap test is reported as either normal, or abnormal. Abnormal test results fall into categories along a spectrum, ranging from mild to serious abnormality. Based on the results, your age, and the likelihood of cancer, your health care provider will advise you about the possible next steps. If the results are abnormal, the three most likely next steps are a repeat Pap test, an HPV DNA test, or colposcopy.

Colposcopy is a procedure used after certain types of abnormal Pap test results to get a closer look at the cervix and vagina. A colposcope is a magnification device used by the health care provider to better see the tissue. Depending on what is seen, a biopsy may be performed.

False Positives and False Negatives

As with all screening tests, the Pap test is not perfect. Sometimes, the Pap test gives a positive result when everything is actually normal—this is called a “false positive.” The Pap test can also give a “false negative” result—a negative result when abnormal cells are present. Age guidelines for how

frequently pap tests should be done on people 21 and over reduce chances of false negatives. Repeating the Pap test on a regular basis can help find abnormal cells that were missed before.

If I Have HPV or an Abnormal Pap Test, What Can I Do?

- Follow-up as recommended by your healthcare provider.
- Stop smoking. People who smoke are more likely to have abnormal Pap tests and more likely to develop cervical cancer than people who do not smoke.
- Continue (or start) healthy habits, such as eating a nutritious diet, reducing stress, and sleeping well.
- Try to remain calm. HPV is very common; you are not alone. The majority of sexually active Americans get HPV at some time in their lives. Remember most young people clear the virus spontaneously over time.

Additional information:

CDC

<https://www.cdc.gov/hpv/>

Foundation for Women’s Cancer

<http://www.foundationforwomenscancer.org/>

National Cervical Cancer Coalition

<http://www.nccc-online.org/>

National Women’s Health Resource Center

<http://www.healthywomen.org>