

DNA Pap

What Women Should Know About **Cervical Cancer Prevention** **Using Pap Smears and HPV Testing**

In the United States, 13,000 women are diagnosed with cervical cancer each year, and 4,100 women die. However, cervical cancer can usually be prevented through early detection of pre-cancerous changes. The traditional screening test for cervical cancer is the Pap test. HPV DNA testing is a new and exciting addition to the Pap test.

What is the Pap test?

The Pap test detects changes in the cells of the cervix. These changes are most commonly harmless, but can be precancerous, or cancer. The test is done by using a small spatula to collect a sample of cells from the surface of the cervix. Then the cells are put on a slide and examined under a microscope

What is HPV (Human Papillomavirus)?

HPV is a virus that most humans carry at some time in their lives. There are approximately 100 types of HPV. Some HPV types cause warts, some cause mild changes in cervical cells that do not turn into cancer, and some cause pre-cancerous changes. Occasionally, having HPV for many years can lead to cancer of the cervix, vagina, vulva (area around the opening of the vagina) or anus.

The types of HPV that are found in the genital areas are usually sexually transmitted. Experts estimate that over 20 million Americans currently harbor the virus. In some age groups, as many as one-third of people have HPV at any one time. Virtually all humans who have ever been sexually active will have the virus at least once. This is normal, it is not dangerous, and does not represent “disease”.

In almost all cases, a healthy immune system will keep the virus (including the cancer-related types) under control or clear it completely. Only a tiny fraction of women with HPV develop cervical cancer if not treated. However, if HPV is persistent over many years, there is a greater chance of developing cell changes that may lead to cervical cancer.

Who carries HPV?

Anyone who has ever had sexual relations may have gotten HPV. It is estimated that nearly

everyone will carry genital HPV at some time in their life, if only briefly.

What are the signs of HPV?

In most cases, HPV is harmless and has no symptoms. However, it may cause changes in the cervical cells. These changes can be identified in your Pap test. Some of these abnormalities are mild and need no treatment. Some of the more severe abnormalities could lead to cervical cancer if not treated but this process takes many years.

Low-risk, non-cancer causing types of HPV also cause genital warts.

Signs of HPV infection can appear weeks, months, or even decades after initial infection, so it is possible to have HPV for a long time without knowing it. Also, women who get HPV during their teenage years may not show cervical cell changes until their thirties or forties – or later – or may never develop any abnormality at all.

Only in very rare cases does the presence of HPV lead to cervical cancer.

Why is the HPV test useful?

The HPV DNA Test can detect the presence of any of 13 types of HPV that are related to cervical cancer. The HPV test helps us know which women really do need yearly Pap tests and which women can safely extend the screening interval to 3 years.

If I have a negative Pap and HPV test, how can I be safe for 3 years? What if I get HPV the next day?

Normally, cervical cell changes occur extremely slowly. It takes an average of 10 years to move from the most severe precancerous changes to cancer.

How is the HPV DNA test done?

It is done at the same time as the Pap test by using a small soft brush to collect cervical cells which are sent to the laboratory.

What is the DNA Pap?

The DNA Pap combines HPV DNA testing with the Pap test, for routine cervical cancer screening. It is useful in women age 30 and over. A normal Pap test with a negative HPV DNA Test means you can be very confident (>99.9%.) that you do not have precancerous cervical changes or cancer. Research shows that one normal DNA Pap result provides better reassurance of no cervical cancer or precancer in the next several years than three normal annual Pap tests.

The **American Cancer Society** recommends that DNA Pap may be safely used to screen women age 30 and over, **and if negative, the test does not need to be repeated for 3 years.** Kaiser Permanente is one of the first organizations to offer this new, more accurate testing to women.

Why is the DNA Pap only for women age 30 and over?

HPV is very common. Cervical cancer is very, very rare, and when it does occur, it almost always does so in women age 30 and over. So many women under age 30 have HPV that adding the HPV test to the Pap isn't helpful.

After age 30, HPV is much less common. Many women who test positive for HPV got the virus years previously, and their immune system hasn't cleared it. So they need annual Pap tests. That makes the HPV test useful.

What if I have a normal Pap result, and my HPV test is positive?

A positive HPV test with a normal Pap result does *not* mean you will develop cervical precancer or cancer. Your doctor will recommend yearly Pap testing for you in order to detect any changes in the cervical cells while they can be easily treated.

Why shouldn't I have both tests every year?

If you are already planning to have a Pap test every year you don't need the HPV test to find out if you need a Pap every year. The Pap test remains an excellent screening test for cervical cancer, but many women who have an abnormal Pap don't have precancerous changes. One of the benefits of combined testing is to reassure women who are negative on both tests that they can very safely have DNA Pap screening every three years. This means fewer tests and visits and biopsies without increasing cancer risk, and agrees with the recommendations of the American Cancer Society and national experts.

Should women under age 30 ever be tested for HPV?

Not if their Pap test is normal. But HPV DNA testing is extremely helpful for women of all ages who have inconclusive Pap test results. Each year, over two million women receive such results known as ASC-US (atypical squamous cells of undetermined significance). Again, a negative HPV DNA test can assure that the woman has no cervical disease. A positive test only means that more frequent Pap testing should be done.

Can HPV infections be treated?

While there is currently no treatment available for the virus itself, treatments do exist for the problems HPV can cause, such as cervical cell changes or genital warts. Your healthcare provider can discuss appropriate treatment options for those conditions with you, if you need them.

Key Points to Remember:

- Almost all women will have HPV at some point, but very few will develop cervical cancer. When a woman's immune system is working normally, only HPV infection that is persistent over many years can lead to cervical cancer.
- If you are age 30 or older, HPV testing can be helpful to know how often you need screening for cervical cancer. If you are under 30, presence of HPV is expected, and testing is only helpful if you have some types of abnormal Pap smear.
- Don't blame! Your HPV status is ***not*** a reliable indicator of you or your partner's sexual behavior.

Resources on HPV and Cervical Cancer

National HPV & Cervical Cancer Resource Center
www.ashastd.org

Women's Cancer Network
www.wcn.org

American Cancer Society
www.cancer.org

National Cervical Cancer Coalition
www.nccc-online.org

National HPV & Cervical Cancer Public Education Campaign
www.cervicalcancercampaign.org

National Women's Health Resource Center
www.healthywomen.org

The HPV Test
www.thehpvtest.com