



HPV & CERVICAL CANCER PREVENTION 2009 INTERNATIONAL TOOLKIT

FREQUENTLY ASKED QUESTIONS: HPV & CERVICAL CANCER

CERVICAL CANCER

What is cervical cancer?

Cervical cancer is cancer of the cervix, the part of the uterus or womb that opens to the vagina. Before widespread use of the Pap test began in the 1950s, cervical cancer was the leading cause of cancer death in American women. Today in the United States, the Pap test has helped reduce cervical cancer death rates by 74 percent.¹ Recent advances in screening and a vaccine for the virus that causes cervical cancer could help to wipe out this disease.

The American Cancer Society (ACS) estimates that, in 2009, about 11,270 new cases of invasive cervical cancer will be diagnosed in the United States and about 4,070 women will die from it. In other countries, cervical cancer affects approximately 500,000 women each year.² In some parts of the world, it is still the most common cancer in women.

What causes cervical cancer?

A virus – the human papillomavirus or HPV – can cause cervical cancer.³ HPV is a highly common sexually transmitted virus that usually goes away by itself without symptoms or treatment. Estimates range from 50 percent to 80 percent of all men and women will have HPV at some point in their lives.^{4,5}

There are two types of HPV – "low-risk" and "high-risk." The low-risk HPV infections can cause genital warts while the high-risk infections can lead to cancer. If the high-risk HPV infection persists, pre-cancerous cells may form.⁶ For most women, the body's immune system destroys the HPV infection and the pre-cancerous cells. However, for some women, if these abnormal cells are not found and treated, they may become cancer.

What are the risk factors for HPV and cervical cancer?

Since cervical cancer is caused by HPV, any woman who is sexually active can be diagnosed with cervical cancer. HPV transmission occurs with skin-to-skin contact. While condoms may reduce the risk of HPV, they do not fully protect against the virus.

Other contributing risk factors for HPV and cervical cancer include:

- Immune suppression or HIV infection
- Cigarette smoking
- Sexual activity beginning at an early age
- Multiple sex partners
- Chlamydia infection
- Diet low in fruits and vegetables
- Overweight or obese
- Oral contraceptives
- Multiple pregnancies
- Low socioeconomic status
- Family history of cervical cancer⁷

What cervical cancer screening options are available?

Traditional Pap test

Doctors use the Pap test to look for abnormalities from a sample of cells taken from the cervix. The cervical cells are smeared on a glass slide and examined under a microscope. The Pap test is an effective method to find pre-cancerous cells that may become cancerous in the future.

Liquid-based Pap test

A newer method to test the cervical cells is the liquid-based Pap test. Instead of smearing the sample directly on a glass microscope slide, the cervical cells are first placed in a small amount of liquid, placed on a slide and then examined under a microscope.

Research has shown that liquid-based Pap tests can be more accurate than the conventional way because blood and mucus are removed, making the cells easier to see.⁸ Liquid-based Pap tests can be somewhat more expensive and not all clinics may have this option available. Other clinics may only use the liquid-based method.

The American Cancer Society (ACS) and the American College of Obstetricians and Gynecology (ACOG) indicate that both the traditional and liquid-based methods are effective cancer screening options. Regardless of the method used, the important factor is to be tested regularly.

The HPV Test

The HPV test checks directly for the presence of the high-risk HPV DNA. HPV testing is FDA-approved for use with a Pap test in routine cervical cancer screening for women age 30 and older and for women of all ages as a follow-up to inconclusive Pap test results, known as ASC-US (atypical squamous cells of undetermined significance).⁹

Women under 30 years of age do not need the HPV test unless they receive abnormal or inconclusive Pap test results. Younger women have more frequent HPV infections (which are likely to be temporary). Thus, HPV testing as part of routine screening is not helpful in this age group.

Research shows that the two tests together are more accurate than the Pap test alone at identifying women with cervical cancer or its early signs.¹⁰ Like the Pap test, the HPV test uses a small, soft brush to collect cervical cells. Women who receive the HPV test along with their Pap test will not notice any difference in their exam.

At what age and how often should women be screened?

According to ACS and ACOG:

- Women should be screened for cervical cancer about three years after they start having sexual intercourse. Screenings should start by the time a woman is 21 years old.
- Women should be screened every year with a regular Pap test. As an alternative, the newer liquid-based Pap test can be used every year or every two years.
- All women under 30 years of age should be screened at least every two years.
- Women age 30 and older who have had three consecutive normal Pap tests do not need to have a Pap test every year. They can be tested every two or three years, unless they have certain risk factors, which they should discuss with their doctor. Or, they can have a Pap test in conjunction with the HPV test every three years, in accordance with their doctor's recommendation.
- According to ACS, women age 70 and older who have had three or more consecutive normal Pap test results and no abnormal test in the last 10 years may stop being screened. ACOG recommends, however, that women age 70 and older should still have Pap tests every two or three years.
- Women who have had a hysterectomy may still need to be screened regularly, depending upon the kind of hysterectomy.

Regardless of age, all women should discuss with their doctor to plan their particular cervical cancer and HPV screenings.

What do the Pap test and HPV test results mean?

All women who have a Pap test will have one of the following results:

1. *The Pap test is negative* – No signs of cancer, pre-cancerous changes or any other abnormalities. These women should continue with regular screenings at least every two years.
2. *The Pap test is positive* – The cervical cells show changes that may be pre-cancerous or cancerous. Results within this category include atypical squamous cells (ASC-US and ASC-H), squamous intraepithelial lesions (SILs) and squamous cell carcinoma. Since ASC-US is an uncertain result, doctors may recommend another Pap test in a few months or a HPV test. For other results, the doctor will most likely recommend a colposcopy and biopsy.¹¹

For women age 30 and older who have an HPV test in conjunction with a Pap test as part of regular screening, the results will fall into one of the following categories:

1. *Both the Pap and HPV tests are negative (normal)* – These women do not need to be tested again for three years.
2. *The Pap test is negative (normal) and the HPV test is positive* – These women will likely repeat the Pap and HPV tests in six to 12 months to see if the virus has gone away. If the virus is still present, then additional evaluation may be done.
3. *Both the Pap and HPV tests are positive* – These women should talk with their doctor about how to proceed. In many cases, a doctor will recommend a colposcopy and biopsy.

HPV VACCINES

What are HPV vaccines?

In June 2006, the Food and Drug Administration (FDA) approved a vaccine shown in clinical research to be 100 percent effective at preventing disease from high-risk types of HPV (16 and 18) that account for approximately 70 percent of all cervical cancers. This vaccine, known as Gardasil®, also targets the two HPV types that cause approximately 90 percent of genital warts. The vaccine is administered as a three-dose series with the second dose given two months after the first dose and the third dose given six months after the first dose.¹²

A second HPV vaccine, known as Cervarix®, has been shown in clinical trials to be equally effective against HPV types 16 and 18, but has not yet been approved by the FDA.¹³

Who should receive HPV vaccines?

To be most effective, HPV vaccines should be given before females become sexually active. The FDA-approved HPV vaccine is available for females aged nine to 26 years. The Advisory Committee on Immunization Practices (ACIP) recommends that the HPV vaccine be given routinely to females aged 11 to 12 years, with catch-up vaccination for girls and women aged 13 to 18 years who have not been vaccinated.

Are the vaccines safe?

In multiple clinical trials so far, both vaccines have received good safety profiles. Redness and tenderness at the vaccination site, along with low-grade fevers have been the most common side effects for both vaccines.

How much does the HPV vaccine cost?

According to the Centers for Disease Control and Prevention (CDC), the retail price of the vaccine is \$130 per dose (\$390 for a three-dose series).

Does health insurance cover the vaccines?

When the ACIP recommends a vaccine, most private insurers typically cover it, as leading medical groups have historically followed the ACIP's recommendations in developing their own medical guidelines. Some states, such as California, require insurers to cover vaccination for those age groups recommended by the ACIP.

In addition, the ACIP recommends that the FDA-approved HPV vaccine be included in the federal Vaccine for Children (VFC) program, which provides immunizations to uninsured and under-insured children up to age 18.

Now that we have an HPV vaccine, is screening still necessary?

Yes. An HPV vaccine should be part of a comprehensive strategy to eliminate cervical cancer. Screening using advanced and appropriate technology, such as HPV testing, is still needed to target cervical cancers caused by HPV types not covered by the vaccine and for women who have already been exposed to HPV.

How can people get the HPV vaccine?

Women and parents of eligible girls should contact their doctor's office or local health clinic to find out if the vaccine is offered. Insurance companies should also be contacted to determine if the vaccine is covered.

SYMPTOMS AND TREATMENT

Does HPV have symptoms?

In most cases HPV does not symptoms. The only way to detect a HPV infection is to test directly for the virus. Signs of an HPV infection may appear weeks, months, or years after the infection, which is why regular cervical cancer screening is important. Cervical cell changes – that result from an HPV infection and may lead to cancer – can only be detected by a Pap test. These changes do not have symptoms.

Can HPV be treated?

There is no treatment for the virus. There are treatments for cervical cell changes that HPV can cause. Women with such changes should discuss treatment options with their doctor.

What are the symptoms of cervical cancer?

Cervical cancer or early cervical pre-cancers often have no signs or symptoms. Early symptoms may include:

- Any unusual discharge from the vagina
- Blood spots or light bleeding when you're not having your period
- Bleeding after menopause
- Bleeding or pain during sex¹⁴

Women with the above symptoms should contact their doctor immediately. However, these symptoms do not necessarily mean a diagnosis of cervical cancer – these symptoms may occur for other reasons.

Can cervical cancer be treated?

Yes, cervical cancer can be treated with surgery, radiation, and/or chemotherapy. Women diagnosed with cervical cancer should discuss treatment options with their doctor to determine the best approach for them.

A FEW ITEMS TO REMEMBER

- Cervical cancer is largely preventable – regular screening, changing or avoiding certain risk factors, and vaccinations are essential.
- Cervical cancer is caused by a common virus – the human papillomavirus, or HPV.
- Cervical cancer screenings include the traditional Pap tests, liquid-based Pap test and HPV testing.
- Cervical cancer and HPV do not usually have symptoms.
- From 50 percent to 80 percent of all people will have HPV at some point in their lifetime.
- The FDA has approved an HPV vaccine for females aged nine to 26 years.

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