

# HPV & Cervical Cancer

*The Human Papillomavirus (HPV) represents a group of very common viruses that can cause the growth of abnormal cells that may develop into cancer.*

**Up to 75 percent of men and women who have ever had sex will develop HPV at some time in their lives, according to the American Cancer Society. Most people will never know they have HPV because no significant symptoms develop and the immune system generally clears the virus before it is detected. A small percentage of people with HPV will have the virus for a longer time and develop cell changes that may lead to cancer.**

## HPV Vaccine

The HPV vaccine is the first vaccine developed to prevent cervical cancer, precancerous genital lesions and genital warts. It targets four types of HPV: types 6, 11, 16 and 18. Types 16 and 18 cause 70 percent of all cervical cancers, as well as a smaller percentage of vaginal and vulvar cancers. Types 6 and 11 cause about 90 percent of genital warts.

An HPV vaccine has been approved by the Food and Drug Administration for girls and women between the ages of 9 and 26 to reduce the risk of developing infection from HPV 6, 11, 16 and 18. The vaccine is most effective in girls and women who have not been infected with these types of HPV. For this reason, it is recommended that the vaccination series be given before a girl becomes sexually active.

MD Anderson recommends that girls receive the vaccine when they are ages 11 to 12. Parents may choose to vaccinate girls as young as age 9. Girls and women ages 13 to 26 may be vaccinated to catch up on a missed vaccine or to complete the vaccination series.

The current vaccine has not been tested in women over age 26; therefore, it is not recommended for women over this age.

Because HPV types 16 and 18 account for only 70 percent of cervical cancers, those who receive the vaccine should continue screening exams with regular Pap tests.



*Susan Rafte is a mother who recently took her teenage daughter to get the HPV vaccine. “As a breast cancer survivor who was diagnosed at age 30, I am very concerned about my daughter’s future health,” Susan says. “I feel that if there is a way to possibly prevent or reduce her risks of getting cancer – any cancer – I want to be sure she has that advantage.”*

## HPV and Cancer

HPV increases the risk for development of the following cancer types in women and/or men:

- cervical
- vulvar
- vaginal
- oral
- anal
- penile

Almost all cancers of the cervix are caused by certain “high-risk” types of HPV. When these forms cannot be controlled by the body’s immune system, they may stimulate the growth of precancerous cells in the cervix. Abnormal cells that are not detected and treated may become cancerous.

# Just the Facts... HPV & Cervical Cancer



## HPV Testing

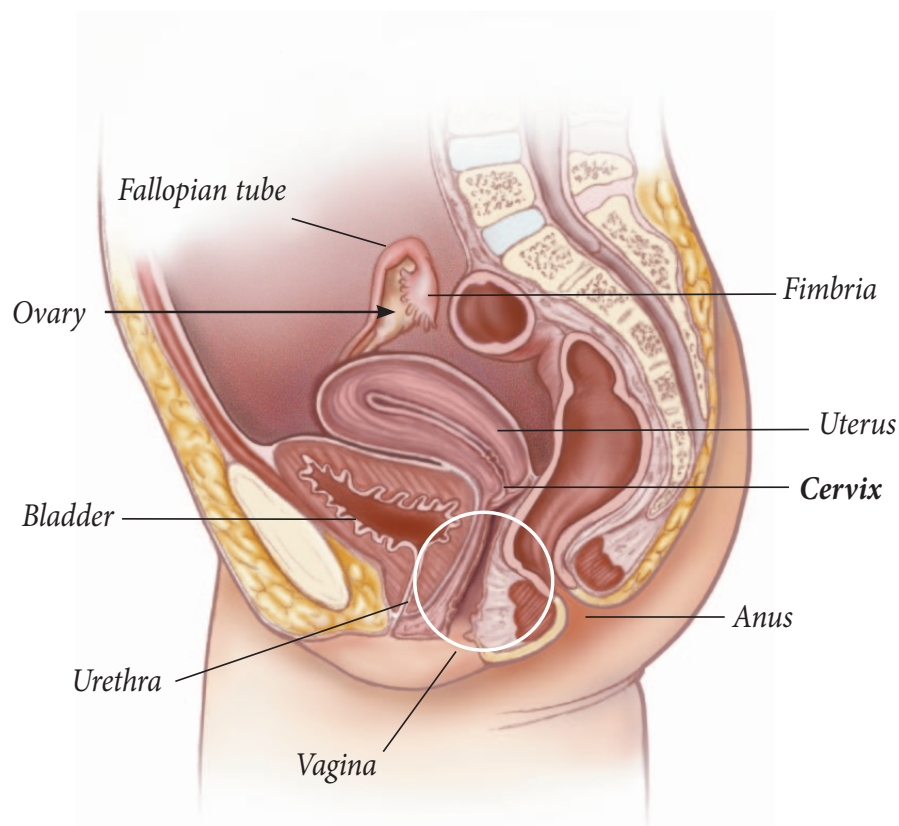
MD Anderson recommends HPV testing, in addition to Pap tests, for certain women. HPV test samples can be collected at the same time as a Pap test. To collect the sample, a health professional wipes a small, soft brush on the cervix, located in a woman's vaginal passage.

MD Anderson's HPV testing recommendations depend on a woman's age. HPV testing is not recommended as part of the regular Pap test for women younger than age 30. At this age, the immune system is more likely to clear the virus without treatment and regular HPV testing may result in unnecessary interventions and follow-up care. Also, cell changes caused by HPV infections may take many years to become cancerous.

However, if Pap test results are unclear, an HPV test should be performed to determine the presence of a strain of the HPV virus that may lead to cervical cancer.

*Speak with your health care provider about cervical cancer and screening exams, including HPV testing.*

*Cervical cancer is a gynecologic cancer that develops in the lining of the cervix. Contrary to popular belief, it is not the most common gynecologic cancer – endometrial and ovarian cancers are more common. Certain high-risk strains of HPV are present in more than 99% of cervical cancer cases.*



*Illustration by: Kathleen Wagner*

# Just the Facts... HPV & Cervical Cancer

*Cervical cancer occurs when cells in the cervix (the part of the womb, or uterus, which opens to the vagina) grow and multiply uncontrollably, damaging surrounding tissue and interfering with the normal functioning of the reproductive system.*

**The most important thing any woman can do to lower her chances of developing cervical cancer is to reduce her risk factors and follow screening guidelines for detecting cancer early. When cancer is detected early, the chances of it being successfully treated are greatest.**

## Cervical Cancer Symptoms

Symptoms of cervical cancer may vary from woman to woman and may include.

- excessive vaginal discharge
- bleeding after intercourse
- abnormal bleeding between menstrual periods

Many of these symptoms are not cancer, but if you notice one or more of them for more than two weeks, see your doctor.

## Risk Factors for Cervical Cancer

*Many factors influence the development of cervical cancer. Risk factors for cervical cancer are listed below.*

- **HPV infection** Women infected with the sexually-transmitted human papillomavirus (HPV) are at an increased risk.
- **Sexual partners** Women who have sex with multiple or high-risk male partners are at increased risk.
- **Early intercourse** Having sexual intercourse at an early age can increase risk.
- **Cigarette smoking** Smoking is a risk factor for cervical cancer.
- **Race** More deaths from cervical cancer occur in African American, Hispanic and American Indian women.
- **Diethylstilbestrol (DES) exposure** Women exposed to DES, a synthetic hormone, before birth are at increased risk.
- **HIV infection** Women infected with HIV are at increased risk.
- **Weakened immune system** Women with a weakened immune system due to an organ transplant, chemotherapy or chronic steroid use are at increased risk.



*Misty Howell was 26 years old when she was diagnosed with cervical cancer. Misty believes that her HPV diagnosis helped her doctors discover and successfully treat her cancer early. "Learning about the impact of HPV really helped me understand why I developed cervical cancer."*

## Reducing Your Risks for Cervical Cancer

You can take action to reduce your risks of developing cervical cancer. Making the healthy changes below does not mean you will not get cervical cancer, but it may lower your chances.

- follow recommended cervical cancer screening guidelines
- decrease risk of sexually transmitted diseases by always using a condom
- limit your number of sexual partners
- avoid sex with individuals infected with a sexually transmitted disease or who have had multiple sexual partners
- participate in a cervical cancer prevention study

## Know Your Risks

MD Anderson has specific cancer screening schedules for women, based on their chances of getting cancer. The exam you get and how often you are tested depends on whether you are at average or increased risk for cancer.

Women at increased risk have a higher chance of getting cancer than women at average risk. Those at increased risk may need to get additional tests, start screening at an earlier age or have exams more frequently.

MD Anderson's screening guidelines for women at average risk for cervical cancer are listed below. For MD Anderson screening guidelines for women at increased risk, visit [www.mdanderson.org/screeningguidelines](http://www.mdanderson.org/screeningguidelines).

## Cervical Cancer Screening

Cancer screening exams are medical tests performed when a person has no symptoms.

Women at average risk have an immune system that functions properly. They have not been exposed to diethylstilbestrol (DES) before birth and are not infected with the Human Immunodeficiency Virus (HIV). They also do not have a history of the Human Papillomavirus (HPV) or severe cervical dysplasia.

These screening guidelines apply to women who are expected to live for at least another 10 years. The guidelines are not for women who have a health condition that would make it hard for a doctor to find and treat cervical cancer.

Age 21 to 29, you should:

- Get a liquid-based Pap test every year.

Age 30 to 65, you should choose ONE of the options below:

1. Get a liquid-based Pap test and Human Papillomavirus (HPV) test every three years as long as your results are negative.
2. Speak with your doctor about a different testing schedule if your test results are positive.

Age 65 and older, you should:

- Speak with your doctor about whether you need to continue screening if you have had three or more normal Pap tests, and no abnormal Pap test, in the last 10 years.

Age 30 and older, who have had a hysterectomy but have not had cervical cancer or severe cervical dysplasia, you should:

- Speak with your doctor about whether you need to continue screening if your hysterectomy included removal of the cervix.
- Get a liquid-based Pap test and Human Papillomavirus (HPV) test if your hysterectomy did not include removal of the cervix.

Repeat these tests every three years if both test results are normal.

Take the time to discuss your own risks with your health care provider who can best advise you on the screening exams and risk-reduction strategies that are right for you.

## MD Anderson Resources

The Cancer Prevention Center can help you understand your risk of developing cancer through risk assessment and, when appropriate, genetic testing. The center offers personalized risk-reduction strategies, including healthy lifestyle recommendations and the use of medications to reduce cancer risk. Specialists perform risk-based cancer screening exams based on age, gender and cancer risk.

MD Anderson provides cancer care services at five convenient locations in the greater Houston area: Bay Area, Katy, Texas Medical Center, Sugar Land and The Woodlands.

For more information about MD Anderson programs or services, or to make an appointment, contact askMD Anderson at 1-877-632-6789 and ask for Carla, or visit [www.MDAnderson.org/ask](http://www.MDAnderson.org/ask).

### Want to learn more about your personal risk for cancer?

Complete MD Anderson's Cancer Risk Check at [www.mdanderson.org/riskcheck](http://www.mdanderson.org/riskcheck).



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