

# Protect against cervical cancer

Cervical cancer was previously one of the most common causes of death due to cancer among American women. Early detection and treatment of conditions that could lead to cervical cancer have resulted in a major decline in the number of deaths in recent years.

Yet the American Cancer Society estimates there will still be almost 13,000 new cases of invasive cervical cancer this year, and a third of those women will die from the disease.

The good news is cervical cancer is preventable and curable if detected

## WHAT IS CERVICAL CANCER?

The **cervix** is part of the female reproductive system. It is the lower, narrow part of the **uterus** (womb) that connects the uterus with the vagina. Cervical cancer occurs when cells in the cervix become abnormal and divide without control or order, creating a mass of extra tissue called a growth or tumor. When a tumor is cancerous, it is called **malignant**. When a tumor is not cancerous, it is called **benign**.

## TREATMENT:

The three main types of treatment for cervical cancer are **surgery**, **radiation therapy**, and less frequently, **chemotherapy** (drug treatment for cancer). Discuss which treatment options are best for your specific situation with your doctor.

early. Regular screening and early detection are keys to preventing the development of invasive cervical cancer.

A study in the February 23, 2000, issue of *JAMA* shows the importance of screening for cervical cancer among women who have human immunodeficiency virus (HIV) infection. The study reports that 1 in 5 HIV-infected women with no evidence of cervical cancer developed abnormal changes in the cells on the surface of the cervix that in some cases may progress to cervical cancer.

## RISK FACTORS:

- **Age** – Rates of cervical cancer **in situ** (cervical cancer that has not spread to other parts of the body) peak in women between the ages of 20 and 30 years. After the age of 25, the number of cases of invasive cervical cancer increases with age in white and black women, but increases more rapidly in black women.
- **Pap test history** – Women who have never had a Pap test or who have not had one for several years have a higher risk of developing cervical cancer.
- **HPV infection** – There are several different types of **human papillomavirus** (HPV), a sexually transmitted virus, which have been linked to cervical cancer.
- **HIV infection** – Women with HIV infection have a higher risk of developing cervical cancer.
- **Sexual history** – Women who were sexually active at an early age and have had many sexual partners have a higher risk of developing cervical cancer.
- **Smoking** – Smoking may produce chemicals that might damage the cells of the cervix and make cancer more likely to develop.

## SYMPTOMS:

Conditions that can lead to cervical cancer usually do not cause pain, so there may not be any symptoms. Symptoms may not appear until abnormal cervical cells become cancerous and invade other tissue nearby. When this occurs, the most common symptom is abnormal bleeding. It's important to see your doctor and receive regular pelvic exams and Pap tests (see "Prevention"), even if you don't have symptoms.

## PREVENTION:

The Pap test (a screening test in which cells in and around the cervix are examined to detect abnormalities) is an effective screening procedure for detecting changes in the cervix, including any conditions that could lead to cancer. All sexually active women or all women over the age of 18 (whichever comes first) should get a Pap test regularly. Speak to your doctor about how frequently you should receive your Pap test for your specific situation. Early treatment of any precancerous conditions could prevent cervical cancer from developing.

## FOR MORE INFORMATION:

- National Cancer Institute Cancer Information Service  
800/4-CANCER  
800/332-8615 (TTY)  
or <http://cancer.net.nci.nih.gov>
- American Cancer Society  
800/ACS-2345  
or [www.cancer.org](http://www.cancer.org)

## INFORM YOURSELF:

To find this and previous *JAMA* Patient Pages, check out the AMA's Web site at [www.ama-assn.org/consumer.htm](http://www.ama-assn.org/consumer.htm). A previous *JAMA* Patient Page about Pap tests was published on May 4, 1999.

Additional Sources: National Cancer Institute, American Cancer Society

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