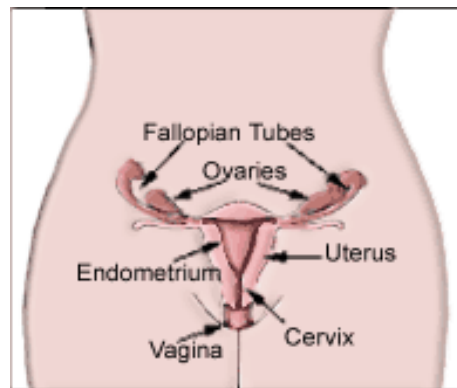


## January Is Cervical Health Awareness Month

### What is the Cervix?

The cervix is part of the female reproductive system. It is the lower, narrow part of the uterus (womb). The uterus, a hollow, pear-shaped organ, is located in a woman's lower belly, between the bladder and the rectum. The cervix forms a canal that opens into the vagina, which leads to the outside of the body.



### What Is Cervical Cancer?

Cancer occurs when cells become abnormal and divide without control or order. Like all other organs of the body, the cervix is made up of many types of cells. Normally, cells divide to make more cells only when the body needs them. If cells keep dividing when new cells are not needed, a mass of tissue forms. This mass of extra tissue, called a growth or tumor, can be benign or malignant.

- Benign tumors are not cancer. Cells from benign tumors do not spread to other parts of the body. Benign tumors are not a threat to life. Polyps, cysts, and genital warts are types of benign growths of the cervix.
- Malignant tumors are cancer. Cancer cells can invade and damage tissues and organs near the tumor. Cancer cells can break away from a malignant tumor and enter the lymphatic system (which helps fight infection) or the bloodstream. This is how cancer can spread to other parts of the body, such as nearby lymph nodes, rectum, bladder, bones, and lungs. The spread of cancer is called metastasis.

Cancer of the cervix may also be called cervical cancer. Most cervical cancers are squamous cell carcinomas. Squamous cells are thin, flat cells that form the surface of the cervix.

Cells on the surface of the cervix sometimes appear abnormal but are not cancerous. Some abnormal changes in cells on the cervix are the first step in a series of slow changes that can lead to cancer years later.

## **What Are the Key Statistics About Cervical Cancer?**

- It occurs most often in women between the age of 35 and 44.
- About 13,170 new cases of invasive cervical cancer will be diagnosed in 2019 and about 4,250 women will die from the disease.
- Both African-American and Hispanic women have higher rates of cervical cancer than white women.
- The number of cervical cancer cases has decreased over the past several decades.
- Death rates have also decreased over the past decades with the increased use of the Pap test (or Pap smear).

## **Who's At Risk For Cervical Cancer?**

- Infection by the human papillomavirus (HPV) is the most important risk factor for cervical cancer. HPV is a group of more than 150 related viruses. Certain types of HPV may cause warts on or around the female and male genital organs and in the anal area. These are called low-risk types of HPV because they are seldom linked to cancer. Other types of HPV are called high-risk types because they are strongly linked to cancers, including cancer of the cervix, vulva, and vagina in women, penile cancer in men, and cancers of the anus, mouth, and throat in both men and women. Infection with HPV is common, and in most people the body can clear the infection by itself. Sometimes, however, the infection does not go away and becomes chronic. Chronic infection, especially when it is caused by certain high-risk HPV types, can eventually cause certain cancers, such as cervical cancer. Although there is currently no cure for HPV infection, there are ways to treat the warts and abnormal cell growth that HPV causes.
- Women who smoke are about twice as likely as non-smokers to get cervical cancer. Tobacco by-products have been found in the cervical mucus of women who smoke. Researchers believe that these substances damage the DNA of cervix cells and may contribute to the development of cervical cancer. Smoking also makes the immune system less effective in fighting HPV infections.
- Women whose immune systems are weakened are more likely than others to develop cervical cancer. Human immunodeficiency virus (HIV), the virus that causes AIDS, damages a woman's immune system and puts them at higher risk for HPV infections. Also at a higher risk are women who are taking drugs to suppress their immune response, such as those being treated for an autoimmune disease or those who have had an organ transplant.
- Some studies have seen a higher risk of cervical cancer in women whose blood tests and cervical mucus showed evidence of past or current chlamydia infection. Chlamydia is a relatively common kind of bacteria that can infect the reproductive system. It is spread by sexual contact.
- Women whose diets don't include enough fruits and vegetables may be at increased risk for cervical cancer.
- Overweight women are more likely to develop adenocarcinoma of the cervix.
- There is evidence that taking oral contraceptives (OCs) for a long time increases the risk of cancer of the cervix. Research suggests that the risk of cervical cancer goes up the longer a woman takes OCs, but the risk goes back down again after the OCs are stopped, and returns to normal about 10 years after stopping.
- Women who have had 3 or more full-term pregnancies have an increased risk of developing cervical cancer.
- Women who were younger than 17 years when they had their first full-term pregnancy are almost 2 times more likely to get cervical cancer later in life than women who waited to get pregnant until they were 25 years or older.

- Many low-income women do not have easy access to adequate health care services, including Pap tests. This means they may not get screened or treated for cervical pre-cancers.
- Women whose mothers were given the drug diethylstilbestrol (DES) between 1940 and 1971 to prevent miscarriage. A rare type of vaginal and cervical cancer has been found in a small number of women whose mothers used DES.

### **What are the signs and symptoms of cervical cancer?**

Precancerous changes of the cervix usually do not cause pain or any other symptoms. These changes are only found if a woman has a pelvic exam and a Pap smear.

Symptoms usually do not appear until abnormal cervical cells become cancerous. The most common symptom is abnormal bleeding. Bleeding may start and stop between regular menstrual periods, or it may occur after sexual intercourse, douching, or a pelvic exam. Menstrual bleeding may last longer and be heavier than usual. Bleeding after menopause (the time of life when a woman's menstrual periods stop permanently) also may be a symptom of cervical cancer. Other symptoms of cervical cancer are vaginal discharge that has a foul smell, unusual color, or is more than usual.

These symptoms may be caused by cancer or by other health problems. It is important for a woman to see her healthcare team if she is having any of these symptoms.

### **Can cervical cancer be found early?**

If all women had pelvic exams and Pap smears regularly, most precancerous conditions would be found and treated before cancer develops and most invasive cancers could be prevented. Any invasive cancer that does occur would likely be found at an early, curable stage.

In a pelvic exam, a healthcare provider checks the uterus, vagina, ovaries, fallopian tubes, bladder, and rectum. These organs are checked for any abnormality in their shape or size. An instrument called a speculum is used to widen the vagina so that the upper part of the vagina and the cervix can be seen.

The Pap smear is a simple test to detect abnormal cells in and around the cervix. A woman should have this test when she is not menstruating; the best time is between 10 and 20 days after the first day of her menstrual period. For about 2 days before a Pap smear, she should avoid douching or using spermicidal foams, creams, or jellies or vaginal medicines (except as directed by a healthcare provider), which may wash away or hide any abnormal cells.

The American Cancer Society recommends that:

- Women between the ages of 21 and 29 should have a Pap smear done every 3 years. HPV testing should not be used in this age group unless it's needed after an abnormal Pap smear result.
- Women between the ages of 30 and 65 should have a Pap smear plus an HPV test (called "co-testing") done every 5 years. This is the preferred approach, but it's OK to have a Pap smear alone every 3 years.
- Women over age 65 who have had regular cervical cancer testing in the past 10 years with normal results should not be tested for cervical cancer. Once testing is stopped, it should not be started again. Women with a history of a serious cervical pre-cancer should continue to be tested for at least 20 years after that diagnosis, even if testing goes past age 65.
- Screening after a total hysterectomy (with removal of the cervix) is not necessary unless the surgery was done as a treatment for cervical cancer or pre-cancer.

## **How can cervical cancer be prevented?**

Some of the best methods to prevent cervical cancer are:

- A well-proven way to prevent cervical cancer is to have testing (screening) to find pre-cancers before they can turn into invasive cancer. The Pap smear and the human papillomavirus (HPV) test are used for this.
- Quit smoking or avoid secondhand smoke.
- Use a condom if you are sexually active.
- Get the HPV vaccine:
  - The HPV vaccine, Gardasil® 9, is most effective when given to young women **before** they become sexually active. The vaccine protects against the types of HPV that cause 90% of cervical cancers.
  - Routine HPV vaccination for girls and boys should be started at age 11 or 12. The vaccination series can be started as early as age 9.
  - HPV vaccination is also recommended for females 13 to 26 years old and for males 13 to 21 years old who have not started the vaccines, or who have started but not completed the series. Males 22 to 26 years old may also be vaccinated.

## **What will happen if my Pap smear is abnormal?**

If your Pap smear is abnormal, your healthcare team may suggest an exam in the office called a colposcopy. During this exam a colposcope, which is like a magnifying glass, is used to look at the cervix and vagina. Abnormal areas can be biopsied and looked at under the microscope. The results of this test helps your healthcare team to make treatment recommendations.

## **Cancer prevention clinical trials**

For information about nationwide cancer prevention trials, you can call the National Cancer Institute at 1-800-4 CANCEER or visit their website at [www.cancer.gov](http://www.cancer.gov).

## **Expert advice from Rutgers Cancer Institute of New Jersey**

Dr. Lorna Rodriguez is the Director, Precision Medicine Initiative and Chief, Gynecologic Oncology at Rutgers Cancer Institute of New Jersey

“The chances of developing cervical cancer are less if during childhood, early adolescence and up to age 26, women get vaccinated against HPV. Furthermore, pre-cancerous cells are found on Pap smears years before a cancer develops and with proper treatment the chances of developing cervical cancer are small. Therefore, Pap smear screening is pivotal to the prevention of cervical cancer as well as vaccination in childhood.”

## **Where can I find further information?**

Resource and Learning Center

732-235-9639

[www.cinj.org/rlc](http://www.cinj.org/rlc)

National Cancer Institute

1-800-4-CANCER

[www.cancer.gov](http://www.cancer.gov)

The American Cancer Society

1-800-ACS-2345

[www.cancer.org](http://www.cancer.org)

National Cervical Cancer Coalition

(818) 909-3849

[www.nccc-online.org](http://www.nccc-online.org)



*RLC website  
Scan with smartphone / device*