



## Cervical Cancer

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### What is cancer of the cervix?

A woman's **cervix** (the opening of the **uterus** at the top of the vagina) is covered by a thin layer of tissue made up of **cells**. Healthy cells grow, divide, and are replaced as needed. Cancer of the cervix occurs when these cells change. Cancer cells divide more rapidly. They may grow into deeper cell layers or spread to other organs. The cancer cells eventually form a mass of tissue called a tumor.

### How long does it take for cervical cancer to develop?

It often takes several years for cervical cancer to develop. During this time, the cells on or around the cervix become abnormal. The early cell changes that occur before cancer is present are called **dysplasia** or **cervical intraepithelial neoplasia (CIN)**.

### What is the main cause of cervical cancer?

The main cause of cervical cancer is **human papillomavirus (HPV)** infection (see FAQ191 "Human Papillomavirus [HPV] Vaccination"). There are many types of HPV. Some types of HPV, called "high-risk types," can cause cancer of the anus, cervix, vulva, vagina, and penis. They also can cause cancer of the head and neck. Other types have been linked to genital warts. There are three vaccines available that can protect against some types of HPV.

### Who is at risk of cervical cancer?

The most important risk factor for cervical cancer is infection with the types of HPV linked to cancer. The following factors increase your risk of becoming infected with HPV:

- Multiple sexual partners
- Having a male sexual partner who has had multiple sexual partners
- Early age at which you first had sex (younger than 18 years)

Other risk factors include the following:

- A personal history of dysplasia of the cervix, vagina, or vulva
- A family history of cervical cancer

- Smoking
- Certain **sexually transmitted infections**, such as chlamydia
- Problems with the **immune system**
- Having a mother who took a drug called diethylstilbestrol (DES) during pregnancy

### Is there a screening test for cervical cancer?

Yes. The **Pap test** checks for abnormal cell changes of the cervix (see FAQ085 “Cervical Cancer Screening”). This allows for early treatment so the abnormal cells do not become cancer. An HPV test also is available. It is used along with the Pap test to screen for cervical cancer in some women and as a follow-up test when a woman has an abnormal Pap test result.

### What are some of the symptoms of cervical cancer?

The first signs may be abnormal bleeding, spotting, or watery discharge from the vagina. Menstrual bleeding may be heavier than usual, and bleeding may occur after sex. Signs of advanced cancer can include pelvic pain, problems urinating, and swollen legs. If the cancer has spread to nearby organs or the **lymph nodes**, the tumors can affect how those organs work. For instance, a tumor might press on your **bladder** or block blood flow in a vein.

### How is cervical cancer diagnosed?

If your health care provider suspects that you have cancer of the cervix, a **biopsy** may be done. For certain abnormal Pap test results that require treatment, the abnormal cervical tissue may be removed and sent to a lab to be studied.

If cervical cancer is diagnosed, your health care provider will assess the size of the cancer and the extent (if any) to which the disease has spread. This process may include the following tests:

- A pelvic exam (which may include a rectal exam)—An examination in which your health care provider checks the uterus, ovaries, and other organs near the cervix
- Cystoscopy—A test in which the inside of the **urethra** and bladder are studied with a lighted device
- Colonoscopy—A test in which the entire colon is examined with a slender, lighted instrument called a colonoscope

### What is staging?

“Staging” is the process of finding out how much the cancer has spread. Most types of cancer have stages from I to IV. The lower the number, the less the cancer has spread.

Some types of cancer, including cervical cancer, have a Stage 0. Stage 0 also is called noninvasive cervical cancer or carcinoma in situ. In Stage 0, cancer cells are present on the top layer of the cervix only. They have not gone into deeper layers of the cervical tissue or other organs. The remaining stages are called invasive cancer. In these stages, the cancer has invaded into deeper layers of the cervix.

### What are the types of treatment?

Invasive cancer of the cervix is treated with surgery (**hysterectomy**), radiation therapy, and chemotherapy (the use of cancer-killing drugs). The type of treatment chosen depends on the cancer stage. You may receive more than one type of treatment.

### Is special follow-up required after treatment?

Your health care provider may suggest more frequent cervical cancer screening tests for the first few years after treatment to make sure that all the cancer cells were removed. Even if your cervix has been removed to treat your cancer, you still need cervical cancer screening. Cells are taken from the upper vagina instead of the cervix.

### Glossary

**Biopsy:** A minor surgical procedure to remove a small piece of tissue that is then examined under a microscope in a laboratory.

**Bladder:** A muscular organ in which urine is stored.

**Cells:** The smallest units of a structure in the body; the building blocks for all parts of the body.

**Cervical Intraepithelial Neoplasia (CIN):** Another term for dysplasia; a noncancerous condition that occurs when normal cells on the surface of the cervix are replaced by a layer of abnormal cells. CIN is graded as 1 (mild dysplasia), 2 (moderate dysplasia), or 3 (severe dysplasia or carcinoma in situ).

**Cervix:** The opening of the uterus at the top of the vagina.

**Dysplasia:** A noncancerous condition that occurs when normal cells are replaced by a layer of abnormal cells.

**Human Papillomavirus (HPV):** The common name for a group of related viruses, some of which are linked to cervical changes and cervical cancer.

**Hysterectomy:** Removal of the uterus.

**Immune System:** The body's natural defense system against foreign substances and invading organisms, such as bacteria that cause disease.

**Lymph Nodes:** Small glands that filter the flow of lymph (a nearly colorless fluid that bathes body cells) through the body.

**Pap Test:** A test in which cells are taken from the cervix and examined under a microscope.

**Sexually Transmitted Infections:** Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus infection, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

**If you have further questions, contact your obstetrician–gynecologist.**

**FAQ163:** Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to institution or type of practice, may be appropriate.

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