

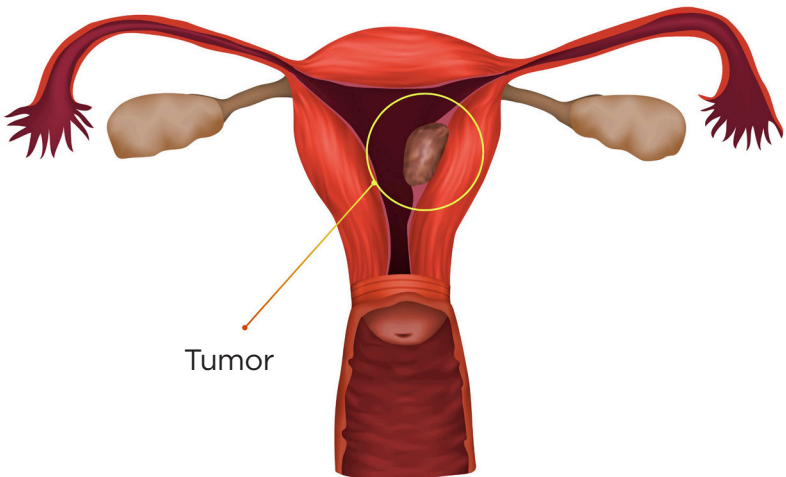


## **Endometrial (Uterine) Cancer**

**SANFORD<sup>®</sup>**  
CANCER CENTER

## Endometrial (Uterine) Cancer Is a Disease in Which Malignant (Cancer) Cells Form in the Lining of the Uterus

The endometrium is the inside lining of the uterus, a hollow, muscular organ in a woman's pelvis. The uterus is where a baby develops. In most non-pregnant women, the uterus is about 3 inches long. The lower, narrow end of the uterus is the cervix, which leads to the vagina.



## Risk Factors for Endometrial Cancer

Anything that increases your chance of getting a disease is called a risk factor. Having a risk factor does not mean that you will get cancer; not having risk factors does not mean that you will not get cancer. Risk factors for endometrial cancer include the following:

- Taking estrogen-only hormone replacement therapy (HRT) after menopause
- Taking tamoxifen to prevent or treat breast cancer
- Obesity
- Having metabolic syndrome
- Having type 2 diabetes
- Exposure of endometrial tissue to estrogen made by the body. This may be caused by:
  - Never giving birth
  - Menstruating at an early age
  - Starting menopause at a later age
  - Obesity
- Having polycystic ovarian syndrome
- Having a family history of endometrial cancer in a first-degree relative (mother, sister, or daughter)
- Having certain genetic conditions, such as Lynch syndrome
- Having endometrial hyperplasia

Older age is the main risk factor for most cancers. The chance of getting cancer increases as you get older.

## Signs and Symptoms

These and other signs and symptoms may be caused by endometrial cancer or by other conditions:

- Vaginal bleeding or discharge not related to menstruation (periods)
- Vaginal bleeding after menopause
- Difficult or painful urination
- Pain during sexual intercourse
- Pain in the pelvic area

## Tests Used to Detect (Find) and Diagnose Endometrial Cancer

A Pap test is commonly used to check for cervical cancer. It is not used to find endometrial cancer. Following a physical exam, these may be performed:

- **Transvaginal ultrasound exam:** A procedure used to examine the vagina, uterus, fallopian tubes, and bladder. An ultrasound transducer (probe) is inserted into the vagina and used to bounce high-energy sound waves (ultrasound) off internal tissues or organs and make echoes. The echoes form a picture of body tissues called a sonogram. The doctor can identify tumors by looking at the sonogram.
- **Biopsy:** A sample of endometrial tissue is removed and checked under a microscope to look for cancer cells. One of the following procedures may be used:
  - **Endometrial biopsy:** The removal of tissue from the endometrium (inner lining of the uterus) by inserting a thin, flexible tube through the cervix and into the uterus. The tube is used to gently scrape a small amount of tissue from the endometrium and then remove the tissue samples. A pathologist views the tissue under a microscope to look for cancer cells.

- **Dilatation and curettage:** A type of surgery to remove samples of tissue from the inner lining of the uterus. The cervix is dilated and a curette (spoon-shaped instrument) is inserted into the uterus to remove tissue. The tissue samples are checked under a microscope for signs of disease. This is also called a D&C.
- **Hysteroscopy:** A hysteroscope is inserted through the vagina and cervix into the uterus. A hysteroscope is a thin, tube-like instrument with a light and a lens for viewing. This scope may be used during a D&C.

## Certain Factors Affect Prognosis (Chance of Recovery) and Treatment Options

The prognosis (chance of recovery) and treatment options depend on the following:

- The stage of the cancer
- The grade of the cancer
- The hormone status of the cancer

Endometrial cancer can usually be cured because it is usually diagnosed early.

## After Endometrial Cancer Has Been Diagnosed, Tests Are Done to Find Out if Cancer Cells Have Spread Within the Uterus or to Other Parts of the Body

The process used to find out whether the cancer has spread within the uterus or to other parts of the body is called staging. It is important to know the stage in order to plan treatment.

Cancer can spread through tissue, the lymph (filter and transport) system, and the blood. When cancer spreads to another part of the body, it is called metastasis. Cancer cells break away from where they began (the primary tumor) and travel through the lymph system or blood.

The metastatic tumor is the same type of cancer as the primary tumor. For example, if endometrial cancer spreads to the lung, the cancer cells in the lung are actually endometrial cancer cells. The disease is metastatic endometrial cancer, not lung cancer. The following may be used in the staging process:

- **CT scan (CAT scan):** A procedure that makes a series of detailed pictures of areas inside the body, taken from different angles. The pictures are made by a computer linked to an x-ray machine. A dye may be injected into a vein or swallowed to help the organs or tissues show up more clearly. This procedure is also called computed tomography, computerized tomography, or computerized axial tomography.
- **PET scan (positron emission tomography scan):** A procedure to find malignant tumor cells in the body. A small amount of radioactive glucose (sugar) is injected into a vein. The PET scanner rotates around the body and makes a picture of where glucose is being used in the body. Malignant tumor cells show up brighter in the picture because they are more active and take up more glucose than normal cells do.

## Stages and Grades for Endometrial Cancer

Endometrial cancer can be staged I (1) through IV (4).

### Stage I

The tumor has grown through the inner lining of the uterus to the endometrium. It may have invaded the myometrium (middle layer of the uterus wall).

### Stage II

The tumor has invaded the cervix.

## Stage III

The tumor has grown through the uterus to reach nearby tissues, such as the vagina or a lymph node.

## Stage IV

The tumor has invaded the bladder or intestine. Or, cancer cells have spread to parts of the body far away from the uterus, such as the liver, lungs or bones.

The cancer grade tells how fast growing your cancer cells are. Grade 1 is the least aggressive and Grade 3 is the most aggressive.

## Treatment Option Overview

### Surgery

Surgery (removing the cancer in an operation) is the most common treatment for endometrial cancer.

- **Hysterectomy:** A surgery to remove the uterus, tubes, ovaries, and cervix.
  - **Lymph nodes** are examined at the time of surgery to determine if the cancer has spread.

Further treatment may be needed after surgery, which can include radiation therapy, chemotherapy, hormonal treatment, or a combination of these.

### Radiation Therapy

Radiation therapy is a cancer treatment that uses high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing. There are two types of radiation therapy:

- **External radiation** therapy uses a machine outside the body to send radiation toward the cancer.
- **Internal radiation therapy** uses a radioactive substance sealed in needles, seeds, wires, or catheters that are placed directly into or near the cancer.

The way the radiation therapy is given depends on the type and stage of the cancer being treated. External and internal radiation therapy are used to treat endometrial cancer, and may also be used as palliative therapy to relieve symptoms and improve quality of life.

## **Chemotherapy**

Chemotherapy is a treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping the cells from dividing.

## **Hormone Therapy**

Depending on the type of cancer, hormone therapy blocks cancer cells from growing.

## **Targeted Therapy**

Targeted therapy is a type of treatment that uses drugs or other substances to identify and attack specific cancer cells.

## **Follow-Up Tests May Be Needed**

Some of the tests that were done to diagnose the cancer or to find out the stage of the cancer may be repeated. It is extremely important to keep your follow-up appointments with your cancer provider. This will help show any early sign of cancer recurrence, and more testing can be ordered if needed.

Support is available for coping with changes that may have happened as a result of cancer treatment. Your healthcare team can offer ideas as well as a plan of care for long-term follow-up.



## Clinical Trials

Clinical trials are done to find out if new cancer treatments are safe and effective or better than the standard treatment.

People who take part in a clinical trial may receive:

- The standard treatment alone or
- The standard treatment plus the new treatment being studied

Taking part in a clinical trial helps improve the way cancer will be treated in the future. Even when clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward.

Some clinical trials only include people who have not yet received treatment. Other trials test treatments for those people whose cancer has not gotten better. There are also clinical trials that test new ways to stop cancer from coming back or reduce the side effects of cancer treatment.

Many of today's standard treatments for cancer are based on earlier clinical trials.

**Ask if there is a clinical trial right for you.**

## To Learn More About Endometrial Cancer

- **American Cancer Society**  
<https://www.cancer.org/>
- **National Cancer Institute**  
<https://www.cancer.gov/>
- **National Comprehensive Cancer Network Guidelines for Patients**  
<https://www.nccn.org/patients/guidelines/cancers.aspx>
- **MedlinePlus**  
<https://medlineplus.gov/>

## Common Questions

What does my pathology report tell me?

What is the stage and grade of my cancer?

What are my goals for treatment?

What kind of support services are available for me about finances, emotions, spiritual questions?

My Health Care Team	Contact Information
Surgeon:	
Medical Oncologist:	
Radiation Oncologist:	
Primary Care Doctor:	
Navigator	
Nurse:	
Registered Dietitian Nutritionist:	
Other:	
Other:	
Other:	

The content of this booklet was adapted from content originally published by the National Cancer Institute.

**SANFORD<sup>®</sup>**  
**CANCER CENTER**