About Endometrial Cancer

Overview and Types

If you've been diagnosed with endometrial cancer or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- What Is Endometrial Cancer?

Research and Statistics

See the latest estimates for new cases of endometrial cancer and deaths in the US and what research is currently being done.

- Key Statistics for Endometrial Cancer
- What's New in Endometrial Cancer Research?

What Is Endometrial Cancer?

Endometrial cancer starts when cells in the endometrium (the inner lining of the uterus) start to grow out of control. Cells in nearly any part of the body can become cancer, and can spread to other parts of the body. To learn more about how cancers start and spread, see What Is Cancer?

About the uterus and endometrium
The uterus is a hollow organ, normally about the size and shape of a medium-sized pear. The uterus is where a fetus grows and develops when a woman is pregnant. It has 2 main parts (see image below):

- The upper part of the uterus is called the \textit{body} or the \textit{corpus}. (\textit{Corpus} is the Latin word for body.)
- The \textit{cervix} is the lower end of the uterus that joins it to the vagina.

When people talk about cancer of the uterus, they usually mean cancers that start the body of the uterus, not the cervix. (\textit{Cervical cancer} is a separate kind of cancer.)

The body of the uterus has 2 main layers:

- The \textbf{myometrium} is the outer layer. This thick layer of muscle is needed to push the baby out during birth.
- The \textbf{endometrium} is the inner layer. During a woman's menstrual cycle, hormones cause the endometrium to change. Estrogen causes the endometrium to thicken so that it could nourish an embryo if pregnancy occurs. If there is no pregnancy, estrogen is produced in lower amounts and more of the hormone called \textit{progesterone} is made. This causes the endometrial lining to shed from the uterus and become the menstrual flow (period). This cycle repeats until menopause.
There is also a layer of tissue called the **serosa** which coats the outside of the uterus.

**Types of endometrial cancer**

Endometrial cancer (also called *endometrial carcinoma*) starts in the cells of the inner lining of the uterus (the endometrium). This is the most common type of cancer in the uterus.

Endometrial carcinomas can be divided into different types based on how the cells look under the microscope. (These are called **histologic types**.) They include:

- Adenocarcinoma (most endometrial cancers are a type of adenocarcinoma called endometrioid cancer -- see below)
- Uterine carcinosarcoma or CS (covered below in the grading section)
- Squamous cell carcinoma
- Small cell carcinoma
- Transitional carcinoma
- Serous carcinoma

**Clear-cell carcinoma, mucinous adenocarcinoma, undifferentiated carcinoma, dedifferentiated carcinoma, and serous adenocarcinoma** are less common types of endometrial adenocarcinomas. They tend to grow and spread faster than most types of endometrial cancer. They often have spread outside the uterus by the time they're diagnosed.

**Endometrioid cancer**

Most endometrial cancers are adenocarcinomas, and endometrioid cancer is the most common type of adenocarcinoma, by far. Endometrioid cancers start in gland cells and look a lot like the normal uterine lining (endometrium). Some of these cancers have squamous cells (squamous cells are flat, thin cells), as well as glandular cells.

There are many variants (or sub-types) of endometrioid cancers including:

- Adenocarcinoma, (with squamous differentiation)
- Adenoacanthoma
- Adenosquamous (or mixed cell)
- Secretory carcinoma
- Ciliated carcinoma
Villoglandular adenocarcinoma

Grading endometrial cancer

The grade of an endometrial cancer is based on how much the cancer cells are organized into glands that look like the glands found in a normal, healthy endometrium.

In lower-grade cancers (grades 1 and 2), more of the cancer cells form glands. In higher-grade cancers (grade 3), more of the cancer cells are disorganized and do not form glands.

- **Grade 1** tumors have 95% or more of the cancer tissue forming glands.
- **Grade 2** tumors have between 50% and 94% of the cancer tissue forming glands.
- **Grade 3** tumors have less than half of the cancer tissue forming glands. Grade 3 cancers tend to be aggressive (they grow and spread fast) and have a worse outlook than lower-grade cancers.

**Grades 1 and 2 endometrioid cancers are type 1 endometrial cancers.** Type 1 cancers are usually not very aggressive and they don’t spread to other tissues quickly. Type 1 endometrial cancers are thought to be caused by too much estrogen. They sometimes develop from atypical hyperplasia, an abnormal overgrowth of cells in the endometrium. (See [Endometrial Cancer Risk Factors](#) for more on this.)

A small number of endometrial cancers are **type 2 endometrial cancer**. Type 2 cancers are more likely to grow and spread outside the uterus, they have a poorer outlook (than type 1 cancers). Doctors tend to treat these cancers more aggressively. They don’t seem to be caused by too much estrogen. Type 2 cancers include all endometrial carcinomas that aren’t type 1, such as papillary serous carcinoma, clear-cell carcinoma, undifferentiated carcinoma, and grade 3 endometrioid carcinoma. These cancers don’t look at all like normal endometrium and so are called **poorly differentiated** or **high-grade**.

**Uterine carcinosarcoma** (CS) starts in the endometrium and has features of both endometrial carcinoma and sarcoma. (The sarcoma is cancer that starts in muscle cells of the uterus.) In the past, CS was considered a different type of uterine cancer called *uterine sarcoma* (see below), but doctors now believe that CS is an endometrial carcinoma that’s so abnormal it no longer looks much like the cells it came from (it’s poorly differentiated).
Uterine CS is a type 2 endometrial carcinoma. CS tumors are also known as *malignant mixed mesodermal tumors* or *malignant mixed mullerian tumors* (MMMTs). They make up about 3% of uterine cancers.

**Other types of cancer in the uterus**

**Uterine sarcomas** start in the muscle layer (myometrium) or supporting connective tissue of the uterus. These include uterine leiomyosarcomas and endometrial stromal sarcomas. These cancers are not covered here, but are discussed in detail in *Uterine Sarcoma*[^4].

Cancers that start in the cervix and then spread to the uterus are different from cancers that start in the body of the uterus. They’re described in *Cervical Cancer*[^5].

**Hyperlinks**


**References**


Key Statistics for Endometrial Cancer

How common is endometrial cancer?

In the United States, cancer of the endometrium (the lining of the uterus) is the most common cancer of the female reproductive organs. The American Cancer Society estimates for cancer of the uterus in the United States for 2019 are:

- About 61,880 new cases of cancer of the body of the uterus (uterine body or corpus) will be diagnosed.
- About 12,160 women will die from cancers of the uterine body.

These estimates include both endometrial cancers and uterine sarcomas. Up to 10% of uterine body cancers are sarcomas, so the actual numbers for endometrial cancer cases and deaths are slightly lower than these estimates.

Lifetime chance of getting endometrial cancer

Endometrial cancer affects mainly post-menopausal women. The average age of women diagnosed with endometrial cancer is 60. It's uncommon in women under the age of 45.

This cancer is slightly more common in white women, but black women are more likely to die from it.

There are more than 600,000 survivors of endometrial cancer in the US today.

Visit the American Cancer Society’s Cancer Statistics Center for more key statistics.
What's New in Endometrial Cancer Research?

Research on endometrial cancer prevention, early detection, and treatment is being done in medical centers around the world.

Endometrial cancer is usually found early, when it's small and easiest to treat. But advanced endometrial is less common and has been hard to study well. Most experts agree that treatment in a clinical trial\(^1\) should be considered for any type or stage of endometrial cancer. This way women can get the best treatment available now and may also get the treatments that are thought to be even better. Many of the new and promising treatments discussed here are only available in clinical trials.

Gene changes

For years we have known that damaged or defective DNA (DNA mutations) can change key genes\(^2\) that control cell growth. If these genes are damaged, out-of-control growth may result in cancer. Scientists are learning more about how certain genes called oncogenes and tumor suppressor genes\(^3\) control cell growth and how changes in these genes cause normal endometrial cells to become cancer.
Sometimes, endometrial cancer and colon cancer may seem to “run in a family.” We now know that some of these families have a higher risk for these cancers because they have an inherited defect in certain genes that normally help repair damage to DNA. If these repair enzymes aren’t working properly, damage to DNA is more likely to persist and cause cancer.

DNA repair defects like this have also been found in endometrial cancer cells from women who haven’t inherited them.

One of the normal genes responsible for suppressing tumor growth, called PTEN, is often abnormal in endometrial cancers. And we know that endometrial cancers without other tumor suppressor genes (or with inactive ones), like the KRAS and the TP53 gene, tend to be more likely to come back after initial treatment. Tests for these and other DNA changes may someday be used to help predict how fast the cancer might grow and spread. This will help doctors choose the best treatment for each woman with this disease.

**Early detection**

Studies are looking for ways to find endometrial cancer early -- before a woman has symptoms. Researchers are looking for DNA changes in endometrial cancer cells. Tests for these changes may someday help find endometrial cancers early.

**Prevention**

As doctors have learned more about the risk factors for endometrial cancer, they’ve begun looking for ways to help prevent it. For instance, being overweight is known to put a woman at higher risk. Studies are being done to find out if these women can benefit from prevention therapies. One study is looking at whether routine screening with endometrial biopsies might be useful in finding cell changes so they can be treated before they become cancer. Another is looking at whether a hormone-releasing IUD might help prevent endometrial cancer in these women.

Hormone therapy and a diabetes drug called metformin are also being studied for endometrial cancer prevention. These are discussed below.

**New drug treatments**

New drugs, new combinations of drugs, chemotherapy drugs, immunotherapies, and targeted therapies are being researched for use in women with advanced endometrial
cancer. The use of chemotherapy, with or without radiation after surgery is also being studied.

**Metformin**

Metformin is a drug used to help control blood sugar in people with diabetes. Studies have found that diabetic women with endometrial pre-cancer and endometrial cancer who are taking metformin have better outcomes compared to women not on metformin. This has led to current clinical trials looking at whether metformin might be used to help prevent endometrial cancer and how it might to help treat women with advanced cancer. It might even be a useful treatment option for women who still want to become pregnant.

**Targeted therapy**

Researchers have developed drugs that target the gene and protein changes found in cancer cells. These targeted drugs are used to treat many kinds of cancer, and studies are now looking at how they might be used for endometrial cancer. Some studies are looking at new targeted therapies, too, and how to use targeted therapy along with other treatments.

**Hormone therapy**

Hormone therapy to treat endometrial cancer has often involved progestins, but drugs that affect estrogen may also be helpful. Studies are looking at how to best use hormone therapy to treat all stages of endometrial cancer. Some studies are trying to find out if hormone therapy might help prevent this cancer, too.

**Immunotherapy**

An exciting new area of research is the use of immunotherapy to treat endometrial cancer. This is treatment that uses the body's own immune system to fight cancer.

The immune system uses certain proteins to "see" and attack foreign cells while leaving normal cells alone. Studies have found that some endometrial cancer cells use these proteins to keep from being attacked by the immune system. As researchers learn more about this, they've begun testing drugs that focus on these cell changes to help the immune system attack the cancer cells.

**Surgery**
Surgery for endometrial cancer\textsuperscript{10} usually involves removing the uterus, cervix, ovaries, and fallopian tubes. Studies are comparing different ways to do this surgery, for instance, open vs. laparoscopic surgery and laparoscopic vs. robot-assisted surgery, to see if any one method is better than others.

Studies are also looking at outcomes when the ovaries are left in place. This keeps the woman from going into menopause and having the problems that come with it. It's most important in younger women with endometrial cancer.

Hyperlinks


References


See all references for Endometrial Cancer ([www.cancer.org/cancer/endometrial-cancer/references.html](http://www.cancer.org/cancer/endometrial-cancer/references.html))

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Endometrial Cancer Causes, Risk Factors, and Prevention

Risk Factors

A risk factor is anything that raises your chance of getting a disease such as cancer. Learn more about the risk factors for endometrial cancer.

- Endometrial Cancer Risk Factors
- What Causes Endometrial Cancer?

Prevention

There's no way to completely prevent endometrial cancer. But there are things you can do that might help lower your risk. Learn more.

- Can Endometrial Cancer Be Prevented?

Endometrial Cancer Risk Factors

A risk factor is anything that raises your chance of getting a disease such as cancer. Different cancers have different risk factors. Some risk factors, like smoking or sun exposure, can be changed. Others, like a person's age or family history, can't be changed.
Although certain factors can increase a woman's risk for endometrial cancer, they don’t always cause the disease. Many women with risk factors never develop endometrial cancer.

Some women with endometrial cancer don’t have any known risk factors. Even if a woman with endometrial cancer has one or more risk factors, there’s no way to know which, if any, of them caused her cancer.

Many factors affect the risk of developing endometrial cancer, including:

- Obesity
- Things that affect hormone levels, like taking estrogen after menopause, birth control pills, or tamoxifen; the number of menstrual cycles (over a lifetime), pregnancy, certain ovarian tumors, and polycystic ovarian syndrome (PCOS)
- Use of an intrauterine device (IUD)
- Age
- Diet and exercise
- Type 2 diabetes
- Family history (having close relatives with endometrial or colorectal cancer)
- Having had breast or ovarian cancer in the past
- Having had endometrial hyperplasia in the past
- Treatment with radiation therapy to the pelvis to treat another cancer

Some of these, like pregnancy, birth control pills, and the use of an intrauterine device are linked to a lower risk of endometrial cancer, while many are linked to a higher risk. These factors and how they affect endometrial cancer risk are covered in more detail below.

**Obesity**

Obesity is a strong risk factor for endometrial cancer and linked to hormone changes, which are covered in more detail below. A woman’s ovaries produce most of her estrogen before menopause. But fat tissue can change some other hormones (called androgens) into estrogens. This can impact estrogen levels, especially after menopause. Having more fat tissue can increase a woman’s estrogen levels, which increases her endometrial cancer risk.

In comparison with women who stay at a healthy weight, endometrial cancer is twice as common in overweight women (BMI 25 to 29.9), and more than 3 times as common in obese women (BMI > 30). You can find your BMI using our body mass index (BMI).
Gaining weight as you get older age and weight cycling (gaining and losing a lot of weight many times in your life) have also been linked to a higher risk of endometrial cancer after menopause.

**Hormone factors**

A woman’s hormone balance plays a part in the development of most endometrial cancers. Many of the risk factors for endometrial cancer affect estrogen levels. Before menopause, the ovaries are the major source of the 2 main types of female hormones -- estrogen and progesterone.

The balance between these hormones changes each month during a woman’s menstrual cycle. This produces a woman’s monthly periods and keeps the endometrium healthy. A shift in the balance of these hormones toward more estrogen increases a woman’s risk for endometrial cancer.

After menopause, the ovaries stop making these hormones, but a small amount of estrogen is still made naturally in fat tissue. Estrogen from fat tissue has a bigger impact after menopause than it does before menopause.

**Estrogen therapy**

Treating the symptoms of menopause with hormones is known as menopausal hormone therapy (or sometimes hormone replacement therapy). Estrogen is the major part of this treatment. Estrogen treatment can help reduce hot flashes, improve vaginal dryness, and help prevent the weakening of the bones (osteoporosis) that can occur with menopause.

But using estrogen alone (without progesterone) can lead to endometrial cancer in women who still have a uterus. To lower that risk, a progestin (progesterone or a drug like it) must be given along with estrogen. This is called combination hormone therapy.

Women who take progesterone along with estrogen to treat menopausal symptoms do not have an increased risk of endometrial cancer. Still, taking this combination increases a woman’s chance of developing breast cancer and also increases the risk of serious blood clots.

If you are taking (or plan to take) hormones after menopause, it's important to discuss the possible risks (including cancer, blood clots, heart attacks, and stroke) with your
doctor.

Like any other medicine, hormones should be used at the lowest dose needed and for the shortest possible time to control symptoms. As with any other medicine you take for a long time, you'll need to see your doctor regularly. Experts recommend yearly follow-up pelvic exams. If you have any abnormal bleeding or discharge from your vagina you should see a health care provider right away. (Do not wait until your next check-up).

For more information about the cancer risks linked to hormone treatment after menopause, see Menopausal Hormone Therapy and Cancer Risk^2.

Birth control pills

Using birth control pills (oral contraceptives) lowers the risk of endometrial cancer. The risk is lowest in women who take the pill for a long time, and this protection lasts for at least 10 years after a woman stops taking the pill. But it’s important to look at all of the risks and benefits when choosing a contraceptive method; endometrial cancer risk is only one factor to consider. It’s a good idea to discuss the pros and cons of different types of birth control with your provider.

Total number of menstrual cycles

Having more menstrual cycles during a woman’s lifetime raises her risk of endometrial cancer. Starting menstrual periods (menarche) before age 12 and/or going through menopause later in life raises the risk. Starting periods early is less a risk factor for women with early menopause. Likewise, late menopause may not lead to a higher risk in women whose periods began later in their teens.

Pregnancy

The hormonal balance shifts toward more progesterone during pregnancy. So having many pregnancies helps protect against endometrial cancer. Women who have never been pregnant have a higher risk, especially if they were also infertile (unable to become pregnant).

Tamoxifen

Tamoxifen is a drug that is used to help prevent and treat breast cancer^3. Tamoxifen acts as an anti-estrogen in breast tissue, but it acts like an estrogen in the uterus. In women who have gone through menopause, it can cause the uterine lining to grow, which increases the risk of endometrial cancer.
The risk of developing endometrial cancer from tamoxifen is low (less than 1% per year). Women taking tamoxifen must balance this risk against the benefits of this drug in treating and preventing breast cancer. This is an issue women should discuss with their providers. If you are taking tamoxifen, you should have yearly gynecologic exams and should be sure to report any abnormal bleeding, as this could be a sign of endometrial cancer.

Ovarian tumors

A certain type of ovarian tumor, the granulosa cell tumor, often makes estrogen. Estrogen made by one of these tumors isn’t controlled the way hormone release from the ovaries is, and it can sometimes lead to high estrogen levels. The resulting hormone imbalance can stimulate the endometrium and even lead to endometrial cancer. In fact, sometimes vaginal bleeding from endometrial cancer is the first symptom of one of these tumors.

Polycystic ovarian syndrome

Women with a condition called polycystic ovarian syndrome (PCOS) have abnormal hormone levels, such as higher androgen (male hormones) and estrogen levels and lower levels of progesterone. The increase in estrogen relative to progesterone can increase a woman’s chance of getting endometrial cancer. PCOS is also a leading cause of infertility in women.

Using an intrauterine device

Women who used an intrauterine device (IUD) for birth control seem to have a lower risk of getting endometrial cancer. Information about this protective effect is limited to IUDs that do not contain hormones. Researchers have not yet studied whether newer types of IUDs that release progesterone have any effect on endometrial cancer risk. But these IUDs are sometimes used to treat pre-cancers and early endometrial cancers in women who wish to be able to get pregnant in the future.

Age

The risk of endometrial cancer increases as a woman gets older.

Diet and exercise

A high-fat diet can increase the risk of many cancers, including endometrial cancer.
Because fatty foods are also high-calorie foods, a high-fat diet can lead to obesity, which is a well-known endometrial cancer risk factor. Many scientists think this is the main way in which a high-fat diet raises endometrial cancer risk. Some scientists think that fatty foods may also have a direct effect on how the body uses estrogen, which increases endometrial cancer risk.

Physical activity lowers the risk of endometrial cancer. Many studies have found that women who exercise more have a lower risk of endometrial cancer, while others suggest that women who spent more time sitting have a higher risk. To learn more, read the American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention.

Diabetes

Endometrial cancer may be about twice as common in women with type 2 diabetes. But diabetes is more common in people who are overweight and less active, which are also risk factors for endometrial cancer. This makes it hard to find a clear link.

Family history

Endometrial cancer tends to run in some families. Some of these families also have a higher risk for colon cancer. This disorder is called hereditary nonpolyposis colon cancer (HNPCC). Another name for HNPCC is Lynch syndrome. In most cases, this disorder is caused by a defect in either the mismatch repair gene MLH1 or the gene MSH2. But at least 5 other genes can cause HNPCC: MLH3, MSH6, TGBR2, PMS1, and PMS2. An abnormal copy of any one of these genes reduces the body’s ability to repair damage to its DNA or control cell growth. This results in a very high risk of colon cancer, as well as a high risk of endometrial cancer. Women with this syndrome have a up to a 70% risk of developing endometrial cancer at some point. (The risk for women in general is about 3%.) The risk of ovarian cancer is also increased. General information about inherited cancer syndromes can be found in Family Cancer Syndromes.

Some families have a higher rate of only endometrial cancer. These families may have a different genetic disorder that hasn't been found yet.

Breast or ovarian cancer

Women who have had breast cancer or ovarian cancer may have an increased risk of endometrial cancer, too. Some of the dietary, hormone, and reproductive risk factors for breast and ovarian cancer also increase endometrial cancer risk.
Endometrial hyperplasia

Endometrial hyperplasia is an increased growth of the endometrium. Mild or simple hyperplasia, the most common type, has a very small risk of becoming cancer. It may go away on its own or after treatment with hormone therapy. If the hyperplasia is called “atypical,” it has a higher chance of becoming a cancer. **Simple atypical hyperplasia** turns into cancer in about 8% of cases if it’s not treated. **Complex atypical hyperplasia (CAH)** has a risk of becoming cancer in up to 29% of cases if it’s not treated, and the risk of having an undetected endometrial cancer is even higher. For this reason, CAH is usually treated. (Treatment is discussed in Can endometrial cancer be prevented?)

Prior pelvic radiation therapy

Radiation used to treat some other cancers can damage the DNA of cells, sometimes increasing the risk of a **second type of cancer** such as endometrial cancer.

Hyperlinks


References

What Causes Endometrial Cancer?

We don't yet know exactly what causes most cases of endometrial cancer, but we do know there are risk factors, like obesity and hormone imbalance, that are strongly linked to this cancer.

We know that most endometrial cancer cells have estrogen and/or progesterone receptors on their surfaces. Somehow, interaction of these receptors and these hormones leads to increased growth of the endometrium. This increased growth can become more and more abnormal until it develops into a cancer.

As noted in the risk factors section, many of the known endometrial cancer risk factors...
affect the balance between estrogen and progesterone in the body.

Scientists are learning more about changes in the DNA of certain genes that occur when normal endometrial cells become cancer. Some of these are discussed in *What's New in Endometrial Cancer Research?*

**Hyperlinks**


**References**


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**Can Endometrial Cancer Be Prevented?**

There’s no sure way to prevent endometrial cancer. But there are things you can do that may help lower your risk of developing this disease. They’re based on changing your risk factors whenever possible.

**Get to and stay at a healthy weight**

Women who are overweight or obese are up to 3 times more likely to get endometrial cancer compared with women at a healthy weight. [Getting to and staying at a healthy weight](http://www.cancer.org/cancer/endometrial-cancer/getting-to-and-staying-at-a-healthy-weight.html)
weight is one way to lower the risk of this cancer.

**Be physically active**

Studies have linked higher levels of physical activity to lower risks of endometrial cancer, so getting regular physical activity (exercise) may also be a way to help lower endometrial cancer risk. An active lifestyle can help you stay at a healthy weight, as well as lower the risk of high blood pressure and diabetes (another risk factor for endometrial cancer).

**Discuss pros and cons of hormone therapy with your doctor**

Estrogen to treat the symptoms of menopause is available in many different forms like pills, skin patches, shots, creams, and vaginal rings. If you’re thinking about using estrogen for menopausal symptoms, ask your doctor about how it will affect your risk of endometrial cancer. Progestins (progesterone-like drugs) can reduce the risk of endometrial cancer in women taking estrogen therapy, but this combination increases the risk of breast cancer. If you still have your uterus and are taking estrogen therapy, be sure to discuss this issue with your doctor.

**Get treated for endometrial problems**

Getting proper treatment of pre-cancer disorders of the endometrium is another way to lower the risk of endometrial cancer. Most endometrial cancers develop over a period of years. Many are known to come after, and possibly start, from less serious changes in the endometrium called *endometrial hyperplasia*. (See Endometrial Cancer Risk Factors for more on this.)

Some cases of hyperplasia go away without treatment, but sometimes it needs to be treated with hormones or even surgery. Treatment with progestins (see Hormone Therapy for Endometrial Cancer) and a dilation and curettage (D&C) or hysterectomy (removing the uterus) can prevent hyperplasia from becoming cancer. (D&C is described in Tests for Endometrial Cancer.)

Abnormal vaginal bleeding is the most common symptom of endometrial pre-cancers and cancers. If you have unusual bleeding, see a health care provider and have it checked right away.

**Talk to your doctor if you have HNPCC**
Women with hereditary nonpolyposis colon cancer (HNPCC or Lynch syndrome) have a very high risk of endometrial cancer. Most experts recommend that a woman with HNPCC have her uterus, ovaries, and fallopian tubes removed (a hysterectomy and bilateral salpingo-oophorectomy) after she's finished having children to prevent endometrial cancer.

**Hyperlinks**


**References**


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Endometrial Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Finding cancer early, when it's small and hasn't spread, often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that's not always the case.

- Can Endometrial Cancer Be Found Early?
- Signs and Symptoms of Endometrial Cancer
- Tests for Endometrial Cancer

Stages and Outlook (Prognosis)

After a cancer diagnosis, staging provides important information about the amount of cancer in the body, the best treatment options, and the likely response to treatment.

- Endometrial Cancer Stages
- Endometrial Cancer Survival Rates, by Stage

Questions to Ask About Endometrial Cancer

Here are some questions you can ask your cancer care team to help you better understand your cancer diagnosis and treatment options.

- Questions to Ask About Endometrial Cancer
Can Endometrial Cancer Be Found Early?

The best way to find endometrial cancer when it's small (at an early stage) is to see a health care provider if you have any signs and symptoms of endometrial cancer, such as abnormal vaginal bleeding or discharge (that's getting worse, occurring between periods, or happening after menopause). Early detection improves the chances that the cancer will be treated successfully.

Most women with endometrial cancer have abnormal vaginal bleeding. Still, some endometrial cancers may reach an advanced stage before causing signs and symptoms. This means the cancer is big and may have spread before it causes any problems that are noticed.

Early detection tests for endometrial cancer

Early detection (also called screening) refers to the use of tests to find a disease, like cancer, in people who don't have symptoms of that disease. Early detection tests can help find some types of cancer at an early stage -- when it's small and hasn't spread beyond the place it started.

If you are at average risk

At this time, there are no screening tests or exams to find endometrial cancer early in women who are at average endometrial cancer risk and have no symptoms.

The American Cancer Society recommends that, at menopause, all women should be told about the risks and symptoms of endometrial cancer and strongly encouraged to report any vaginal bleeding, discharge, or spotting to their doctor.

Women should also talk to their doctors about getting regular pelvic exams. A pelvic exam can find some cancers, including some advanced uterine cancers, but it's not very useful for finding early endometrial cancers.

The Pap test, which screens women for cervical cancer\(^1\), can sometimes find some early endometrial cancers, but it's not a good test for this type of cancer. For information on screening tests for cervical cancer, see Cervical Cancer Prevention and Early Detection\(^2\).
If you are at increased risk

The American Cancer Society recommends that most women at increased risk for endometrial cancer should be informed of their risk and be advised to see their doctor whenever they have any abnormal vaginal bleeding. This includes women whose risk is increased due to age, late menopause, never giving birth, infertility, obesity, diabetes, high blood pressure, estrogen treatment, or tamoxifen therapy.

Women who have (or may have) hereditary non-polyposis colon cancer\(^3\) (HNPCC, or Lynch syndrome) have a very high risk of endometrial cancer.

If several family members have had colon or endometrial cancer, consider getting genetic counseling to learn about your family’s risk of having HNPCC. If you (or a close relative) have genetic testing and are found to have a mutation in one of the genes for HNPCC, you are at high risk of getting endometrial cancer, as well as some other kinds of cancer. See Understanding Genetic Testing\(^4\) for more on this.

The American Cancer Society recommends that women who have (or may have) HNPCC be offered yearly testing for endometrial cancer with endometrial biopsy starting at age 35. Their doctors should discuss this test with them, including its risks, benefits, and limitations. This applies to women known to carry HNPCC-linked gene mutations, women who are likely to carry such a mutation (those with a mutation known to be present in the family), and women from families with a tendency to get colon cancer where genetic testing has not been done.

Another option for a woman who has (or may have) HNPCC is to have a hysterectomy once she is done having children. (See Can Endometrial Cancer Be Prevented?)\(^5\)

Hyperlinks


References
Signs and Symptoms of Endometrial Cancer

There are a few symptoms that may point to endometrial cancer. Some are more common as the cancer becomes advanced (grows and spreads).

Unusual vaginal bleeding, spotting, or other discharge

About 90% of women with endometrial cancer have abnormal vaginal bleeding. This might be a change in their periods, bleeding between periods, or bleeding after menopause. Non-cancer problems can also cause abnormal bleeding. But it's important to have a doctor check out any irregular bleeding right away. If you've gone through menopause, it's especially important to report any vaginal bleeding, spotting, or abnormal discharge to your doctor.

Non-bloody vaginal discharge may also be a sign of endometrial cancer. Even if you can't see blood in the discharge, it doesn't mean there's no cancer. Any abnormal discharge should be checked out by a doctor.

Pelvic pain, a mass, and weight loss

Pain in the pelvis, feeling a mass (tumor), and losing weight without trying can also be symptoms of endometrial cancer. These symptoms are more common in later stages of the disease. Still, any delay in seeking medical help may allow the disease to progress even further. This lowers the odds of treatment being successful.

Although any of these symptoms can be caused by things other than cancer, it's important to have them checked out by a doctor.

Hyperlinks

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**Tests for Endometrial Cancer**

Endometrial cancer is most often diagnosed after a woman goes to her doctor because she has symptoms.

If there’s a possibility you could have endometrial cancer, you should be examined by a gynecologist. This is a doctor trained to diagnose and treat diseases of the female reproductive system. Gynecologists can diagnose endometrial cancer, and sometimes treat it. Specialists in treating cancers of the endometrium and other female reproductive organs are called gynecologic oncologists. These doctors treat all stages of endometrial cancer.

**Medical history and physical exam**

If you have any of the symptoms of endometrial cancer (see [Signs and Symptoms of Endometrial Cancer](http://www.cancer.org/cancer/endometrial-cancer/signs-symptoms.html)), you should see a doctor right away. The doctor will ask about
your symptoms, risk factors\(^1\), and medical history. The doctor will also do a physical exam and a pelvic exam.

**Ultrasound**

Ultrasound is often one of the first tests used to look at the uterus, ovaries, and fallopian tubes in women with possible gynecologic problems. Ultrasound uses sound waves to take pictures of the inside of the body. A small wand (called a transducer or probe) gives off sound waves and picks up the echoes as they bounce off the organs. A computer translates the echoes into pictures.

For a **pelvic ultrasound**, the transducer is moved over the skin of the lower part of the belly (abdomen). Often, to get good pictures of the uterus, ovaries, and fallopian tubes, the bladder needs be full. That's why women getting a pelvic ultrasound are asked to drink lots of water before the test.

A **transvaginal ultrasound** (TVUS) is often better to look at the uterus. For this test, the TVUS probe (that works the same way as the ultrasound transducer) is put into the vagina. Images from the TVUS can be used to see if the uterus contains a mass (tumor), or if the endometrium is thicker than usual, which can be a sign of endometrial cancer. It may also help see if cancer is growing into the muscle layer of the uterus (myometrium).

A small tube may be used to put salt water (saline) into the uterus before the ultrasound. This helps the doctor see the uterine lining more clearly. This procedure is called a **saline infusion sonogram** or **hysterosonogram**. (Sonogram is another term for ultrasound.)

Ultrasound can be used to see endometrial polyps (growths), measure how thick the endometrium is, and can help doctors pinpoint the area they want to biopsy.

**Endometrial tissue sampling**

To find out exactly what kind of endometrial change is present, the doctor must take out some tissue so that it can be tested and looked at with a microscope. Endometrial tissue can be removed by endometrial biopsy or by dilation and curettage (D&C) with or without a hysteroscopy. A gynecologist usually does these procedures, which are described below.

**Endometrial biopsy**
An endometrial biopsy is the most commonly used test for endometrial cancer and is very accurate in postmenopausal women. It can be done in the doctor's office. A very thin, flexible tube is put into the uterus through the cervix. Then, using suction, a small amount of endometrium is removed through the tube. The suctioning takes about a minute or less. The discomfort is a lot like menstrual cramps and can be helped by taking a nonsteroidal anti-inflammatory drug (like ibuprofen) before the procedure. Sometimes a thin needle is used to inject numbing medicine (local anesthetic) into the cervix just before the procedure to help reduce the pain.

**Hysteroscopy**

For this procedure, the doctor puts a tiny telescope (about \(\frac{1}{6}\) inch in diameter) into the uterus through the cervix. To get a better view of the inside (lining) of the uterus, the uterus is filled with salt water (saline). This lets the doctor look for and biopsy anything abnormal, such as a cancer or a polyp. This is usually done using a local anesthesia (numbing medicine) while the patient is awake.

**Dilation and curettage (D&C)**

If the endometrial biopsy sample doesn't provide enough tissue, or if the biopsy suggests cancer but the results are unclear, a D&C must be done. In this outpatient procedure, the opening of the cervix is enlarged (dilated) and a special instrument is used to scrape tissue from inside the uterus. This may be done with or without a hysteroscopy.

This procedure takes about an hour and may require general anesthesia (where drugs are used to put you into a deep sleep) or conscious sedation (drugs are put into a vein to make you drowsy) either with local anesthesia injected into the cervix or a spinal (or epidural). A D&C is usually done in an outpatient surgery area of a clinic or hospital. Most women have little discomfort after this procedure.

**Testing endometrial tissue samples**

Endometrial tissue samples removed by biopsy or D&C are looked at with a microscope to see if cancer is present. If cancer is found, the lab report will state what type of endometrial cancer it is (like endometrioid or clear cell) and what grade it is.

Endometrial cancer is graded on a scale of 1 to 3 based on how much it looks like normal endometrium. (See [What Is Endometrial Cancer?](#)) Women with lower grade cancers are less likely to have cancer in other part of their body and are less likely to have the cancer come back after treatment (recur).
**Hereditary non-polyposis colon cancer (HNPCC)**

If the doctor suspects hereditary non-polyposis colon cancer (HNPCC) as an underlying cause of the endometrial cancer, the tumor tissue can be tested for protein and gene changes. Examples of HNPCC-related changes include:

- Having fewer mismatch repair proteins
- Defects in mismatch repair genes
- DNA changes (called microsatellite instability, or MSI) that can happen when one of the genes that causes HNPCC is faulty

If these protein or DNA changes are present, the doctor may suggest genetic testing for the genes that cause HNPCC. Testing for low mismatch repair protein levels or for MSI is most often done in women diagnosed with endometrial cancer at a young age or who have a family history of endometrial or colon cancer.

**Tests to look for cancer spread**

If the doctor suspects that your cancer is advanced, you'll probably have to have other tests to look for cancer spread.

**Chest x-ray**

A plain x-ray of your chest may be done to see if cancer has spread to your lungs.

**Computed tomography (CT)**

The CT scan is an x-ray procedure that creates detailed, cross-sectional images of the inside of your body. For a CT scan, you lie on a table while X-rays are done. Instead of taking one picture, like a standard x-ray, a CT scanner takes many pictures as the camera rotates around you. A computer then combines these pictures into an image of a slice of your body. The machine will take pictures of many slices of the part of your body that's being studied.

CT scans are not used to diagnose endometrial cancer. But they can help see if the cancer has spread to other organs and to see if it has come back after treatment.

**Magnetic resonance imaging (MRI)**

MRI scans use radio waves and strong magnets instead of x-rays. The energy from the
radio waves is absorbed and then released in a pattern formed by the type of tissue and
by certain diseases. A computer translates the pattern of radio waves given off by the
tissues into a very detailed image of the inside of the body. This creates cross sectional
slices of the body like a CT scanner and it also makes slices that are parallel with the
length of your body.

MRI scans are very helpful for looking at the brain and spinal cord. Some doctors also
think MRI is a good way to tell whether, and how far, the endometrial cancer has grown
into the body of the uterus. MRI scans may also help find enlarged lymph nodes with a
special technique that uses very tiny particles of iron oxide. These are given into a vein
and settle into lymph nodes where they can be spotted by MRI.

**Positron emission tomography (PET)**

In this test radioactive glucose (sugar) is given to look for cancer cells. Because cancers
use glucose (sugar) at a higher rate than normal tissues, the radioactivity will tend to
collect in the cancer. A scanner can spot the radioactive deposits. This test can be
helpful for spotting small collections of cancer cells. Special scanners combine a PET
scan with a CT to more precisely locate areas of cancer spread. PET scans are not a
routine part of the work-up of early endometrial cancer, but may be used for more
advanced cases.

**Cystoscopy and proctoscopy**

If a woman has problems that suggest the cancer has spread to the bladder or rectum,
the inside of these organs will probably be looked at through a lighted tube. In
cystoscopy the tube is put into the bladder through the urethra. In proctoscopy the
tube is put in the rectum. These exams allow the doctor to look for cancer. Small tissue
samples can also be removed during these procedures for testing. They can be done
using a local anesthetic but some patients may need general anesthesia. Your doctor
will let you know what to expect before and after these tests. These procedures were
used a lot in the past, but now are rarely part of the work up for endometrial cancer.

**Blood tests**

**Complete blood count**

The complete blood count (CBC) is a test that measures different cells in the blood,
such as the red blood cells, the white blood cells, and the platelets. Endometrial cancer
can cause bleeding, which can lead to low red blood cell counts (anemia).
CA-125 blood test

CA-125 is a substance released into the bloodstream by many, but not all, endometrial and ovarian cancers. If a woman has endometrial cancer, a very high blood CA-125 level suggests that the cancer has likely spread beyond the uterus. Some doctors check CA-125 levels before surgery or other treatment. If they’re elevated, they can be checked again to see how well the treatment is working (levels will drop after surgery if all the cancer is removed).

CA-125 levels are not needed to diagnose endometrial cancer, so this test isn’t done on all patients.

Hyperlinks

5. www.cancer.org/treatment/understanding-your-diagnosis/tests/x-rays-and-other-radiographic-tests.html
7. www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html

References


Burton ER, Sorosky JI. Recognition and Therapeutic Options for Malignancy of the


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**Endometrial Cancer Stages**

After a woman is diagnosed with endometrial cancer, doctors will try to figure out if it has spread and, if so, how far. This process is called staging. The stage of a cancer describes the amount of cancer in the body. It helps determine how serious the cancer is and how best to treat it. **The stage is one of the most important factors in deciding how to treat the cancer and determining how successful the treatment might be.**

Endometrial cancer stages range from stage I (1) through IV (4). As a rule, the lower the
number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread to other parts of the body. And within a stage, an earlier letter means a lower stage. Although each person’s cancer is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

**How is the stage determined?**

The 2 systems used for staging endometrial cancer, the **FIGO (International Federation of Gynecology and Obstetrics) system** and the **American Joint Committee on Cancer TNM staging system** are basically the same.

They both stage (classify) this cancer based on 3 factors:

- **The extent (size) of the tumor (T):** How far has the cancer grown into the uterus? Has the cancer reached nearby structures or organs?
- **The spread to nearby lymph nodes (N):** Has the cancer spread to the para-aortic lymph nodes? These are the lymph nodes in the pelvis or around the aorta (the main artery that runs from the heart down the back of the abdomen and pelvis).
- **The spread (metastasis) to distant sites (M):** Has the cancer spread to distant lymph nodes or distant organs in other parts of the body?

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced. Once a person’s T, N, and M categories have been determined, this information is combined in a process called **stage grouping** to assign an overall stage.

The staging system in the table below uses the **pathologic stage**. It’s found by examining tissue removed during an operation. This is also known as **surgical staging**. Sometimes, if surgery isn’t possible right away, the cancer will be given a **clinical stage** instead. This is based on the results of a physical exam, biopsy, and imaging tests done **before** surgery. For more details, see [Cancer Staging](#).

The system described below is the most recent AJCC system. It went into effect January 2018.

Endometrial cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

<table>
<thead>
<tr>
<th>Stage grouping</th>
<th>FIGO Stage</th>
<th>Stage description*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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*Staging system in the table below uses the pathologic stage.*
<table>
<thead>
<tr>
<th>Classification</th>
<th>Stage</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1</td>
<td>The cancer is growing inside the uterus. It may also be growing into the glands of the cervix, but not into the supporting connective tissue of the cervix (T1).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>T1a</td>
<td>The cancer is in the endometrium (inner lining of the uterus) and may have grown less than halfway through the underlying muscle layer of the uterus (the myometrium) (T1a).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>T1b</td>
<td>The cancer has grown from the endometrium into the myometrium. It has grown more than halfway through the myometrium, but has not spread beyond the body of the uterus (T1b).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>T2</td>
<td>The cancer has spread from the body of the uterus and is growing into the supporting connective tissue of the cervix (called the cervical stroma). But it has not spread outside the uterus (T2).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>T3</td>
<td>The cancer has spread outside the uterus, but has not spread to the inner lining of the rectum or urinary bladder (T3).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>IIIA</td>
<td>T3a</td>
<td>The cancer has spread to the outer surface of the uterus (called the serosa) and/or to the fallopian tubes or ovaries (the adnexa) (T3a).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
<tr>
<td>IIIB</td>
<td>T3b</td>
<td>The cancer has spread to the vagina or to the tissues around the uterus (the parametrium) (T3b).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It has not spread to nearby lymph nodes (N0) or to distant sites (M0).</td>
<td></td>
</tr>
</tbody>
</table>
| IIC1           | T1-T3 | The cancer is growing in the body of the uterus. It may have spread to
<table>
<thead>
<tr>
<th>Stage</th>
<th>T-Stage</th>
<th>N-Stage</th>
<th>Location/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIA</td>
<td>T1-T3</td>
<td>N0</td>
<td>The cancer is growing in the body of the uterus. It may have spread to nearby tissues, but not growing into the inside of the bladder or rectum (T1 to T3).</td>
</tr>
<tr>
<td>IIIC2</td>
<td>T1-T3</td>
<td>N2mi</td>
<td>The cancer is growing in the body of the uterus. It may have spread to some nearby tissues, but is not growing into the inside of the bladder or rectum (T1 to T3).</td>
</tr>
<tr>
<td>IIIC2</td>
<td>T1-T3</td>
<td>N2a</td>
<td>The cancer is growing in the body of the uterus. It may have spread to some nearby tissues, but is not growing into the inside of the bladder or rectum (T1 to T3).</td>
</tr>
<tr>
<td>IIIC2</td>
<td>T1-T3</td>
<td>N2a</td>
<td>The cancer is growing in the body of the uterus. It may have spread to some nearby tissues, but is not growing into the inside of the bladder or rectum (T1 to T3).</td>
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<td>IIIC2</td>
<td>T1-T3</td>
<td>N2a</td>
<td>The cancer is growing in the body of the uterus. It may have spread to some nearby tissues, but is not growing into the inside of the bladder or rectum (T1 to T3).</td>
</tr>
<tr>
<td>IVA</td>
<td>T4</td>
<td>N0</td>
<td>The cancer has spread to the inner lining of the rectum or urinary bladder (called the mucosa) (T4).</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>The cancer has spread to inguinal (groin) lymph nodes, the upper abdomen, the omentum, or to organs away from the uterus, such as the lungs, liver, or bones (M1).</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>The cancer has spread to inguinal (groin) lymph nodes, the upper abdomen, the omentum, or to organs away from the uterus, such as the lungs, liver, or bones (M1).</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>The cancer can be any size (Any T) and it might or might not have spread to other lymph nodes (Any N).</td>
</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>The cancer can be any size (Any T) and it might or might not have spread to other lymph nodes (Any N).</td>
</tr>
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</tr>
<tr>
<td>IVB</td>
<td>Any T</td>
<td>Any N</td>
<td>The cancer can be any size (Any T) and it might or might not have spread to other lymph nodes (Any N).</td>
</tr>
</tbody>
</table>

*The following additional categories are not listed on the table above:

- **TX**: Main tumor cannot be assessed due to lack of information.
- **T0**: No evidence of a primary tumor.
- **NX**: Regional lymph nodes cannot be assessed due to lack of information.

**Hyperlinks**

2. [www.cancer.org/treatment/understanding-your-diagnosis/staging.html](http://www.cancer.org/treatment/understanding-your-diagnosis/staging.html)

**References**

American Joint Committee on Cancer. Corpus Uteri-Carcinoma and Carcinosarcoma.
Endometrial Cancer Survival Rates, by Stage

Survival rates can give you an idea of what percentage of people with the same type and stage of cancer are still alive a certain amount of time (usually 5 years) after they were diagnosed. They can’t tell you how long you will live, but they may help give you a better understanding of how likely it is that your treatment will be successful.

Keep in mind that survival rates are estimates and are often based on previous outcomes of large numbers of people who had a specific cancer, but they can’t predict what will happen in any particular person’s case. These statistics can be confusing and may lead you to have more questions. Talk with your doctor about how these numbers may apply to you, as he or she is familiar with your situation.

What is a 5-year relative survival rate?

A relative survival rate compares women with the same type and stage of endometrial cancer to women in the overall population. For example, if the 5-year relative survival rate for a specific stage of endometrial cancer is 90%, it means that women who have that cancer are, on average, about 90% as likely as women who don’t have that cancer to live for at least 5 years after being diagnosed.
Where do these numbers come from?

The American Cancer Society relies on information from the SEER* database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.

The SEER database tracks 5-year relative survival rates for endometrial cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by AJCC TNM stages (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:

- **Localized**: There is no sign that the cancer has spread outside of the uterus. This includes stage I and II cancers.
- **Regional**: The cancer has spread from the uterus to nearby structures or lymph nodes. This includes mainly stage III and IVA cancers.
- **Distant**: The cancer has spread to distant parts of the body such as the lungs, liver or bones. For endometrial cancer, this includes stage IVB cancers.

5-year relative survival rates for endometrial cancer

(Based on people diagnosed with endometrial cancer between 2008 and 2014.)

<table>
<thead>
<tr>
<th>SEER Stage</th>
<th>5-year Relative Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>96%</td>
</tr>
<tr>
<td>Regional</td>
<td>70%</td>
</tr>
<tr>
<td>Distant</td>
<td>18%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>84%</td>
</tr>
</tbody>
</table>

Understanding the numbers

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don’t take everything into account.** Survival rates are grouped based on how far the cancer has spread, but your age, overall health, how well the cancer responds to treatment, and other factors will also affect your outlook.
- **Women now being diagnosed with endometrial cancer may have a better outlook than these numbers show.** Treatments improve over time, and these numbers are based on women who were diagnosed and treated at least five years ago.
earlier.

*SEER= Surveillance, Epidemiology, and End Results

References


See all references for Endometrial Cancer (www.cancer.org/cancer/endometrial-cancer/references.html)

Questions to Ask About Endometrial Cancer

As you cope with cancer, you need to have honest, open talks with your doctor. You should feel free to ask any question, no matter how small it might seem. Nurses, social workers, and other members of your treatment team may also be able to answer many of your questions. Here are some questions you might want to ask:

When you’re told you have endometrial cancer

- What type and grade of endometrial cancer do I have?
- Has my cancer spread outside the uterus?
• What is the stage of the cancer and what does that mean?

When deciding on a treatment plan

• What treatments might be right for me? What do you recommend? Why?
• Are there clinical trials that I should think about?
• What’s the goal of treatment?
• How will you monitor my response to treatment?
• What should I do to be ready for treatment?
• What risks or side effects should I expect? (Ask about both short- and long-term side effects.)
• Will treatment affect my sex life?
• Will I be able to have children after treatment?
• What are the chances my cancer will come back (recur) with the treatments we have discussed?
• Will my health insurance cover treatment? How much will I have to pay?

During treatment

Once treatment starts, you’ll need to know what to expect and what to look for. Not all of these questions may apply to you, but asking the ones that do may be helpful.

• How will we know if the treatment is working?
• Is there anything I can do to help prevent or manage side effects?
• What symptoms or side effects should I tell you about right away?
• How can I reach you on nights, holidays, or weekends?
• Do I need to change what I eat during treatment?
• Are there any limits on what I can do?
• What kind of exercise should I do, and how often?
• Can I still take hormone replacement therapy?
• How will I feel during treatment?

After treatment
• Are there any limits on what I can do?
• What symptoms should I watch for?
• What kind of exercise should I do now?
• What type of follow-up will I need after treatment?
• How often will I need to have follow-up exams and imaging tests?
• Will I need any blood tests?
• How will we know if the cancer has come back? What should I watch for?
• What will my options be if the cancer comes back?
• When can I go back to my usual activities at work and/or around the house?

Along with these sample questions, be sure to write down some of your own. For instance, you might want to ask about getting a second opinion[^5], or you may need specific information about how long it might take you to recover so you can plan your work schedule.

Doctors aren’t the only ones who can give you information. Other health care professionals, such as nurses and social workers, can answer a lot of your questions. To find out more about speaking with your health care team, see The Doctor-Patient Relationship[^6].

Hyperlinks


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Written by

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

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Treating Endometrial Cancer

If you've been diagnosed with endometrial cancer, your cancer care team will discuss your treatment options with you. It's important to weigh the benefits of each treatment option against the possible risks and side effects.

How is endometrial cancer treated?

The most common types of treatment for women with endometrial cancer are:

- Surgery for Endometrial Cancer
- Radiation Therapy for Endometrial Cancer
- Chemotherapy for Endometrial Cancer
- Hormone Therapy for Endometrial Cancer
- Targeted Therapy for Endometrial Cancer
- Immunotherapy for Endometrial Cancer

Common treatment approaches

Surgery is the main treatment for most women with this cancer. But in some cases, a more than 1 kind of treatment may be used. The choice of treatment depends largely on the type of cancer and stage of the disease when it's found. Other factors could play a part in choosing the best treatment plan. These include your age, your overall state of health, whether you plan to have children, and other personal considerations.

- Treatment Choices for Endometrial Cancer, by Stage

Who treats endometrial cancer?

Depending on the type and stage of the endometrial cancer, you may need more than
one type of treatment. Doctors on your cancer treatment team may include:

- A *gynecologist*: a doctor who specializes in diseases of the female reproductive tract
- A *gynecologic oncologist*: a doctor who specializes in treating cancers of the female reproductive system (including surgery and chemotherapy)
- A *radiation oncologist*: a doctor who uses radiation to treat cancer
- A *medical oncologist*: a doctor who uses chemotherapy and other medicines to treat cancer

Many other specialists may be involved in your care as well, including nurses, nurse practitioners, social workers, psychologists, rehabilitation specialists, and other health professionals.

- **Health Professionals Associated With Cancer Care**¹

### Making treatment decisions

It’s important to talk with your family and treatment team about all of your treatment options, as well as their possible side effects, so you make the choice that best fits your needs. If there’s anything you don’t understand, ask to have it explained.

If time permits, it’s often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more sure of the treatment plan you choose.

- **Questions to Ask About Endometrial Cancer**²
- **Seeking a Second Opinion**³

### Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they’re not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.
• Clinical Trials

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn’t mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor’s medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

• Complementary and Alternative Medicine

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists.

• Find Support Programs and Services in Your Area

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.
Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it’s important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- If Cancer Treatments Stop Working
- Palliative or Supportive Care

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don’t hesitate to ask him or her questions about your treatment options.

Surgery for Endometrial Cancer

Surgery is often the main treatment for endometrial cancer and consists of a hysterectomy, often along with a salpingo-oophorectomy, and removal of lymph nodes. In some cases, pelvic washings are done, the omentum is removed, and/or peritoneal biopsies are done. If the cancer has spread throughout the pelvis and abdomen (belly), a debulking procedure (removing as much cancer as possible) may be done. These are discussed in detail below.

Hysterectomy

Types of hysterectomy

The main treatment for endometrial cancer is surgery to take out the uterus and cervix. This operation is called a hysterectomy. When the uterus is removed through an incision (cut) in the abdomen (belly), it’s called a simple or total abdominal hysterectomy.

If the uterus is removed through the vagina, it’s known as a vaginal hysterectomy. This may be an option for women who are are not healthy enough for other types of
surgery.

When endometrial cancer has spread to the cervix or the area around the cervix (called the **parametrium**), a **radical hysterectomy** is done. In this operation, the entire uterus, the tissues next to the uterus (parametrium and uterosacral ligaments), and the upper part of the vagina (next to the cervix) are all removed. This operation is most often done through the abdomen, but it can also be done through the vagina.

**Surgeries done along with hysterectomy**

It's rare to remove the uterus but not the ovaries when treating endometrial cancer. (Still, it might be done in certain cases for women who are premenopausal.) Removing the ovaries and fallopian tubes is called a **bilateral salpingo-oophorectomy (BSO)**. It isn't really part of a hysterectomy. It's a separate procedure that's done during the same operation. (See the Bilateral salpingo-oophorectomy section below.)

To decide what **stage**¹ the cancer is in, lymph nodes in the pelvis and around the aorta also need to be removed. This is called **lymph node dissection**. It can be done through the same incision as the abdominal hysterectomy. If the hysterectomy is done vaginally, lymph nodes can be removed with laparoscopic surgery. (See "Lymph node surgery" below.)

**How is hysterectomy done?**

As mentioned above, this surgery can be done through a large cut in the belly (abdomen). It can also be done through the vagina. **Laparoscopic surgery** or minimally invasive surgery is another option that's becoming more common.

**Laparoscopy**² is a technique that lets the surgeon look at the inside of the abdomen and pelvis through narrow tubes put in through very small cuts (incisions) made in the belly. Long, tiny surgical instruments can be controlled through the tubes. This allows the surgeon to operate without making a large incision in the abdomen. It's been linked to less pain and blood loss, and it can shorten recovery time after surgery.

Both a simple hysterectomy and a radical hysterectomy can be done through the abdomen using laparoscopic surgery. Laparoscopic surgery might also be used to help safely remove other organs and tissues when a vaginal hysterectomy is done.

Laparoscopic surgery for endometrial cancer seems to be just as good as more traditional open procedures if done by a surgeon who has a lot of experience in laparoscopic cancer surgeries.
A robotic approach is increasingly being used to do laparoscopic procedures, and outcomes are much the same. In robotic surgery, the surgeon sits at a control panel in the operating room and moves robotic arms to operate through many small incisions. Robotic surgeries do tend to take longer than regular laparoscopic surgeries.

For any of these procedures, general anesthesia is used so the patient is in a deep sleep and doesn't feel pain during the operation.

**Bilateral salpingo-oophorectomy**

This operation removes both fallopian tubes and both ovaries. It's usually done at the same time the uterus is removed (either by simple hysterectomy or radical hysterectomy) to treat endometrial cancers. Removing both ovaries means that you'll go into menopause if you haven't done so already.

If you're younger than 45 and have stage I endometrial cancer, you may want to talk to your surgeon about keeping your ovaries. Even though women whose ovaries are removed might have a lower chance of the cancer coming back, removing the ovaries doesn’t seem to help them live longer.

**Lymph node surgery**

**Pelvic and para-aortic lymph node dissection** is an operation done to remove lymph nodes from the pelvis and the area next to the aorta. The nodes are tested to see if they contain cancer cells that have spread from the endometrial tumor. This information is part of finding the surgical stage of the cancer.

The surgery is called a lymph node dissection when most or all of the lymph nodes in the area are removed. This is usually done at the same time as the operation to remove the uterus (hysterectomy). If you’re having an abdominal hysterectomy, the lymph nodes can be removed through the same incision. In women who have had a vaginal hysterectomy, lymph nodes may be removed by laparoscopic surgery.

When only a few of the lymph nodes in an area are removed, it’s called lymph node sampling.

Depending on the cancer type and grade, the amount of cancer in the uterus (tumor size), and how deeply the cancer invades the muscle of the uterus, and imaging test results, lymph nodes might not need to be removed.
Sentinel lymph node mapping

Sentinel lymph node (SLN) mapping may be used in early-stage endometrial cancer if imaging tests don't clearly show signs that cancer has spread to the lymph nodes in your pelvis. To do this, a blue or green dye is injected into the area with the cancer, near the cervix. The surgeon then looks for the lymph nodes that turn blue or green (from the dye). These lymph nodes are the ones that the cancer would first drain into (the sentinel nodes). They’re removed and tested to see if there are cancer cells in them. If so, more lymph nodes are taken out because they likely have cancer cells in them, too. If there are no cancer cells in sentinel nodes, no more nodes are removed. This procedure is usually done at the same time as surgery to remove the uterus (hysterectomy). Your doctor will talk with you about whether SLN mapping is an option for you.

Pelvic washings (peritoneal lavage)

In this procedure, the surgeon “washes” the abdominal and pelvic cavities with salt water (saline). The fluid is then collected (using suction) and sent to the lab to see if it contains cancer cells. This is also called peritoneal lavage. If there are endometrial cancer cells in the fluid, the cancer stage may change (the surgical stage) and the next steps of treatment could be impacted.

Other procedures that might be used to look for cancer spread

Omentectomy: The omentum is the layer of fatty tissue that covers the abdominal contents, sort of like an apron. Cancer sometimes spreads to this tissue. When this tissue is taken out, it’s called an omentectomy. This may be done during a hysterectomy if cancer has spread there. Biopsies of the omentum might also be done to check for cancer spread. (Small pieces are taken out and tested for cancer cells.)

Peritoneal biopsies: The tissue lining the pelvis and abdomen is called the peritoneum. Peritoneal biopsies remove small pieces of this lining to check for cancer cells.

Tumor debulking

If cancer has spread throughout the abdomen, the surgeon might try to take out as much of the tumor as possible. This is called debulking. Debulking a cancer can help other treatments, like radiation or chemotherapy, work better. So, it might be helpful in treating some types of endometrial cancer.
Recovery after surgery

The hospital stay for an abdominal hysterectomy is usually 3 to 7 days. The average hospital stay after an abdominal radical hysterectomy is about 5 to 7 days. Complete recovery can take up to 4 to 6 weeks. A laparoscopic procedure and vaginal hysterectomy usually require a hospital stay of 1 or 2 days and 2 to 3 weeks for recovery. Complications of these surgeries are not common and depend on the surgical approach. They include nerve or vessel damage, excessive bleeding, wound infection, blood clots, and damage to nearby tissues (the urinary and intestinal systems).

A radical hysterectomy affects the nerves that control the bladder, so a catheter is used to drain urine right after surgery. It's often kept in for at least a few days. If the bladder hasn't recovered completely when the catheter removed, it may be put back in. Another option is that you're shown how to put a catheter yourself several times a day to empty your bladder. Over time, bladder function returns.

Side effects of surgery

Any hysterectomy causes infertility (you won't be able to get pregnant).

For women who were premenopausal before surgery, removing the ovaries will cause menopause right away. This can lead to symptoms like hot flashes, night sweats, and vaginal dryness. Long-term, it can lead to osteoporosis and increased risk for heart disease, which impact all post-menopausal women.

Removing lymph nodes in the pelvis can lead to a build-up of fluid in the legs and genitals. This can become a life-long problem called lymphedema. It's more likely if radiation is given after surgery.

Surgery and menopausal symptoms can also affect your sex life. For more, see Sex and the Woman With Cancer.

Talk with your treatment team about side effects you might have right after surgery and later on. There might be things you can do to help prevent side effects. Know what to expect so you can get help right away.

More information about Surgery

For more general information about surgery as a treatment for cancer, see Cancer Surgery.
To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects⁷.

Hyperlinks

2. www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy/laparoscopy.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy/laparoscopy.html

References


Radiation Therapy for Endometrial Cancer

Radiation therapy uses high-energy radiation (like x-rays) to kill cancer cells. It can be given in 2 ways to treat endometrial cancer:

- By putting radioactive materials inside the body. This is called internal radiation therapy or brachytherapy.
- By using a machine that focuses beams of radiation at the tumor, much like having an x-ray. This is called external beam radiation therapy.

In some cases, both brachytherapy and external beam radiation therapy are used. When that’s done, the external beam radiation is usually given first, followed by the brachytherapy. The stage of the cancer are used to help decide what areas need to be treated with radiation therapy and which types of radiation are used.

Radiation is most often used after surgery to treat endometrial cancer. It can kill any
cancer cells that may still be in the treated area. If your treatment plan includes radiation after surgery, you will be given time to heal before starting radiation. Often, at least 4 to 6 weeks are needed.

Less often, radiation might be given before surgery to help shrink a tumor so it’s easier to remove.

Women who are not healthy enough for surgery may get radiation as their main treatment.

**Brachytherapy**

Women who have had their uterus (and cervix) removed may have the upper part of the vagina treated with brachytherapy. This is called **vaginal brachytherapy**. A source of radiation (a radioactive material) is put into a cylinder (called an applicator) and the cylinder is put into the vagina. (It feels a lot like a snug tampon.) The size of the cylinder and how much radiation is in it depend on each case. The upper part of the vagina, closest to the uterus, is always treated. With brachytherapy, the radiation mainly affects the area of the vagina in contact with the cylinder. Nearby structures like the bladder and rectum get less radiation exposure.

This procedure is done in the radiation therapy area of a hospital or a radiation treatment center. There are 2 types of brachytherapy used for endometrial cancer, low-dose rate (LDR) and high-dose rate (HDR).

- **In LDR brachytherapy**, the applicator with the radiation source in it is left in for about 1 to 4 days. The patient needs to be still to keep the applicator from moving during treatment, so she’s usually needs to stay in the hospital during treatment. Because the patient has to stay immobile, this form of brachytherapy carries a risk of serious blood clots in the legs (called deep venous thrombosis or DVT). LDR isn't commonly used in the US.

- **In HDR brachytherapy**, the radiation is stronger. Each treatment takes a very short time (usually less than an hour), and the radiation is only in for 10 to 20 minutes. The applicator is only in place when the treatment is done. You will be able to go home the same day. For endometrial cancer, HDR brachytherapy might be given weekly or even daily for at least 3 doses.

The most common side effect is changes in the lining of the vagina. (Called radiation vaginitis, this is discussed in more detail below, in the side effects section.) If needed, pain medicines can be used to help you be more comfortable while the applicator is in.
External beam radiation therapy

In this type of treatment the radiation is delivered from a source outside of the body.

External beam radiation therapy is often given 5 days a week for 4 to 6 weeks. The skin covering the treatment area is carefully marked with permanent ink or tiny tattoos. A special mold of the pelvis and lower back is custom made to make sure you are in the exact same position for each treatment. Each treatment takes less than a half-hour, but daily visits to the radiation center are needed.

Sometimes chemotherapy is given along with the radiation to help it work better. This is called chemoradiation.

Side effects of radiation therapy

Short-term side effects

Common side effects of radiation therapy include tiredness, upset stomach, or loose stools. Severe fatigue, which may not start until about 2 weeks after treatment begins, is also common. Diarrhea is common, but usually can be controlled with over-the-counter medicines. Nausea and vomiting may occur, but can be treated with medicine. These side effects are more common with external beam radiation than with brachytherapy.

Side effects tend to be worse when chemotherapy is given with radiation.

Skin changes, which can range from mild redness to peeling and blistering, are quite common. The skin may release fluid, which can lead to infection, so care must be taken to clean and protect the area exposed to radiation. Sometimes, as it heals, the skin in the treated area becomes darker or less flexible (harder).

Radiation can irritate the bladder, and you might have problems urinating. Irritation to the bladder, called radiation cystitis, can result in discomfort, blood in the urine, and an urge to urinate often.

Radiation can also cause irritation in the intestine. Rectal irritation or bleeding is called radiation proctitis. It’s sometimes treated with enemas that contain a steroid (like hydrocortisone) or suppositories that contain an anti-inflammatory.

Radiation can irritate the vagina, leading to discomfort and drainage (a discharge). This is called radiation vaginitis. If it occurs, the doctor may recommend douching with a dilute solution of hydrogen peroxide. When the irritation is severe, open sores can
develop in the vagina, which may need to be treated with an estrogen cream.

Radiation can also lead to **low blood counts**, causing anemia (low red blood cells) and leukopenia (low white blood cells). The blood counts usually return to normal within a few weeks after radiation is stopped.

**Long-term side effects**

Radiation therapy may cause changes to the lining of the vagina leading to vaginal dryness. This is more common after vaginal brachytherapy than after pelvic radiation therapy. In some cases scar tissue can form in the vagina. The scar tissue can make the vagina shorter or more narrow (called **vaginal stenosis**), which can make sex (vaginal penetration) painful. A woman can help prevent this problem by stretching the walls of her vagina several times a week. This can be done by having sex 3 to 4 times a week or by using a vaginal dilator (a plastic or rubber tube used to stretch out the vagina). Still, vaginal dryness and pain with sex can be long-term side effects of radiation. Some centers have physical therapists who specialize in pelvic floor therapy which can help to treat these vaginal symptoms and sometimes improve sexual function. Ask your doctor about this if you are bothered by these problems. You can also find some helpful information in Sex and the Woman With Cancer.²

Pelvic radiation can damage the ovaries, resulting in **premature menopause**. This is not an issue for most women treated for endometrial cancer because they have already gone through menopause, either naturally or as a result of surgery to treat the cancer (hysterectomy and removal of the ovaries).

Pelvic radiation therapy can also lead to blockages that keep fluid from draining out of the leg. This can lead to severe swelling, called **lymphedema**. Lymphedema is a long-term side effect; it doesn’t go away after radiation is stopped. In fact it may not start for several months or even years after treatment ends. This side effect is more common if pelvic lymph nodes were removed during surgery to remove the cancer. There are specialized physical therapists who can help treat this. It’s important to start treatment right away if you develop it. To learn more, see Lymphedema.³

Radiation to the pelvis can **weaken the bones**, leading to fractures of the hips or pelvic bones. It’s important that women who have had endometrial cancer contact their doctor right away if they have pelvic pain. Such pain might be caused by a fracture, recurrent cancer (cancer that’s come back after treatment), or other serious conditions.

Pelvic radiation can also lead to long-term problems with the bladder (radiation cystitis) or bowel (radiation proctitis). Rarely, radiation damage to the bowel can cause a **blockage** (called **obstruction**) or for an abnormal connection to form between the bowel...
and the vagina or outside skin (called a fistula). These conditions may need to be treated with surgery.

If you are having side effects from radiation, discuss them with your doctor. There are things you can do to get relief from these symptoms or to prevent them from happening.

**More information about radiation therapy**

To learn more about how radiation is used to treat cancer, see [Radiation Therapy](#).

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#).

**Hyperlinks**

5. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)

**References**


Chemotherapy for Endometrial Cancer

Chemotherapy (chemo) is the use of drugs that kill cancer cells. They're given into a vein or taken by mouth as pills. These drugs go into the bloodstream and reach throughout the body. Because of this, chemo is often part of the treatment when endometrial cancer has spread beyond the endometrium to other parts of the body and surgery can't be done.

Chemo is also commonly used for high grade cancers, which grow and spread quickly, and cancer that comes back after treatment.

Chemo is not used to treat stage I and II endometrial cancers.

In most cases, a combination of chemo drugs is used. Combination chemotherapy tends to work better than one drug alone.

Chemo is often given in cycles: a period of treatment, followed by a rest period. The chemo drugs may be given on one or more days in each cycle.

Chemo drugs used to treat endometrial cancer may include:
Most often, 2 or more drugs are combined for treatment. The most common combinations include carboplatin/paclitaxel and cisplatin/doxorubicin. Less often, carboplatin/docetaxel and cisplatin/paclitaxel/doxorubicin may be used.

For carcinosarcoma, the chemo drug ifosfamide (Ifex®) is often used, either alone or along with either cisplatin or paclitaxel. The targeted drug called trastuzumab (Herceptin®) might be added for carcinosarcomas that are HER2 positive. (HER2 is a protein that helps some cancer cells grow and spread faster. You can learn more about it at Breast Cancer HER2 Status.

Sometimes chemo is given for a few cycles, followed by radiation. Then chemo is given again. This is called sandwich therapy. It's sometimes used for endometrial papillary serous cancer and uterine carcinosarcoma.

Another treatment option is to give chemo with radiation (called chemoradiation). The chemo can help the radiation work better, but it can be harder on the patient because the combination causes more side effects.

Side effects of chemotherapy

These drugs kill cancer cells but can also damage some normal cells, which in turn causes side effects. Side effects of chemotherapy depend on the drugs used, the amount taken, and how long treatment is given. Common side effects include:

- Nausea and vomiting
- Loss of appetite
- Mouth sores
- Vaginal sores
- Hair loss

Also, most chemo drugs can damage the blood-producing cells of the bone marrow. This can result in low blood cell counts, such as:
- Low white blood cells, which increases the risk of infection
- Low platelet counts, which can cause bleeding or bruising after minor cuts or injuries
- Low red blood cells (anemia), which can cause problems like fatigue and shortness of breath

Most of the side effects of chemotherapy get better over time when treatment ends, but some can last a long time. Different drugs can cause different side effects. For instance, doxorubicin can damage the heart muscle over time. The chance of heart damage goes up as the total dose of the drug goes up, so doctors put a limit on how much doxorubicin a person can get.

Cisplatin can cause kidney damage, so you’ll be given lots of IV fluids before and after chemo to help protect the kidneys. Both cisplatin and paclitaxel can cause nerve damage (called neuropathy). This can lead to numbness, tingling, or even pain in the hands and feet. Ifosfamide can injure the lining of the bladder, causing it to bleed (called hemorrhagic cystitis). To prevent this, you might be given large amounts of IV fluids and a drug called mesna along with the chemo.

Before starting chemotherapy, be sure to discuss the drugs and their possible side effects with your health care team.

If you have side effects while on chemotherapy, remember that there are ways to prevent or treat most of them. For instance, there are many anti-nausea drugs that can help prevent or reduce nausea and vomiting. Be sure to tell your health care team about any side effects you have. Treating them right away can often keep them from getting worse.

More information about chemotherapy

For more general information about how chemotherapy is used to treat cancer, see Chemotherapy. To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects.  

Hyperlinks

2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html

References


See all references for Endometrial Cancer (www.cancer.org/cancer/endometrial-cancer/references.html)

Last Medical Review: March 27, 2019 Last Revised: March 27, 2019

Hormone Therapy for Endometrial Cancer

This type of treatment uses hormones or hormone-blocking drugs to treat cancer. It’s not the same as the hormone therapy given to ease the symptoms of menopause (menopausal hormone therapy). It’s most often used to treat endometrial cancer that’s advanced (stage III or IV) or has come back after treatment (recurred). Hormone
therapy is often used along with chemotherapy.

Hormone treatment for endometrial cancer can include:

- Progestins (This is the main hormone treatment used.)
- Tamoxifen
- Luteinizing hormone-releasing hormone agonists (LHRH agonists)
- Aromatase inhibitors (AIs)

At this time, no one type of hormone treatment has been found to be the best for endometrial cancer.

**Progestins**

The main hormone treatment for endometrial cancer uses progesterone or drugs like it (called progestins). The 2 most commonly used progestins are:

- Medroxyprogesterone acetate (Provera®), which can be given as an injection or as a pill
- Megestrol acetate (Megace®), which is given as a pill or liquid

These drugs slow the growth of endometrial cancer cells. They've been found to be useful in treating women with endometrial cancer who want to be able to get pregnant in the future, and this is an area of research interest.

**Side effects can include:**

- Hot flashes
- Night sweats
- Weight gain (from fluid retention and an increased appetite)
- Worsening of depression
- Increased blood sugar levels in women with diabetes
- Serious blood clots (this is rare)

Sometimes endometrial hyperplasia and early endometrial cancers can be treated with an intrauterine device (IUD) that contains a progestin called levonorgestrel. This may be combined with another hormone drug, like medroxyprogesterone acetate or a luteinizing hormone-releasing hormone agonist. (See below.)
Tamoxifen

Tamoxifen is an anti-estrogen drug often used to treat breast cancer. It might also be used to treat advanced or recurrent endometrial cancer. Alternating progesterone and tamoxifen is an option that seems to work well and be better tolerated than progesterone alone.

The goal of tamoxifen therapy is to keep any estrogens in the woman's body from boosting the growth of the cancer cells. Though tamoxifen may keep estrogen from "feeding" the cancer cells, it acts like a weak estrogen in other parts of the body. It doesn't cause bone loss, but it can cause hot flashes and vaginal dryness. Women taking tamoxifen also are at higher risk for serious blood clots in the legs.

Luteinizing hormone-releasing hormone agonists

Most women with endometrial cancer have had their ovaries removed as a part of treatment. Some women might have had radiation treatments that made their ovaries inactive. This helps keep the body from making estrogen and may also slow the growth of the cancer.

Luteinizing hormone-releasing hormone agonists (LHRH agonists) are drugs that lower estrogen levels in women who still have working ovaries. These drugs "turn off" the ovaries in women who are premenopausal so they don't make estrogen.

Goserelin (Zoladex®) and leuprolide (Lupron®) are drugs that might be used to treat endometrial cancer. They're given as a shot every 1 to 3 months. These drugs are also called gonadotropin-releasing hormone (GNRH) agonists.

Side effects can include any of the symptoms of menopause, such as hot flashes and vaginal dryness. They can also cause muscle and joint aches. If taken for a long time (years), these drugs can weaken bones, sometimes leading to osteoporosis.

Aromatase inhibitors

Even after the ovaries are removed (or are not working), estrogen is still made in fat tissue. This becomes the body's main source of estrogen. Drugs called aromatase inhibitors can stop this estrogen from being made and lower estrogen levels even further. Examples of aromatase inhibitors include letrozole (Femara®), anastrozole (Arimidex®), and exemestane (Aromasin®). These drugs are most often used to treat breast cancer, but can be helpful in treating endometrial cancer, too. They're most often used to treat women who cannot have surgery, but doctors are looking at other ways
these drugs could be helpful.

Side effects can include headaches, joint and muscle pain, and hot flashes. If taken for a long time (years), these drugs can weaken bones, sometimes leading to osteoporosis. These drugs are still being studied for how to best use them to treat endometrial cancer.

Hyperlinks


References


National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Health Professional
Targeted Therapy for Endometrial Cancer

Targeted therapy is treatment with drugs that are made to target certain changes in the cancer cells. Some people group them with chemotherapy, but they aren’t the same. Targeted therapies leave most healthy cells alone. They often cause fewer and different side effects than chemo.

Targeted therapy is used to treat many types of cancer, but it’s very new in the treatment of certain types of endometrial cancer. Only a few of these drugs are in use at this time, and are only given as part of a clinical trial, but many more are being studied. As doctors learn more about endometrial cancer cells, targeted therapy could become an important part of treatment. Today, these drugs are mostly used to treat high-risk endometrial cancers and those that have spread (metastasized) or come back (recurred) after treatment.

Bevacizumab

Bevacizumab (Avastin®) belongs to a class of drugs called angiogenesis inhibitors. For cancers to grow and spread, they need to make new blood vessels to nourish themselves (a process called angiogenesis). This drug attaches to a protein called VEGF (which signals new blood vessels to form) and slows or stops cancer growth.

Bevacizumab is often given along with chemotherapy, but it can be given alone. It’s given as an infusion into the vein (IV) every 2 to 3 weeks.

Common side effects include high blood pressure, tiredness, bleeding, low white blood cell counts, headaches, mouth sores, loss of appetite, and diarrhea. Rare, but possibly...
serious side effects include blood clots, severe bleeding, slow wound healing, holes forming in the colon (perforations), and the formation of abnormal connections between the bowel and the skin or bladder (fistulas). If a perforation or fistula forms, it can lead to severe infection and surgery may be needed.

**mTOR inhibitors**

These drugs block a cell protein known as mTOR, which normally helps cells grow and divide into new cells. These drugs might be given alone or added to chemo or hormone therapy to treat advanced (higher stage) endometrial cancers, or those that come back after treatment.

**Everolimus (Afinitor®)** is taken as a pill once a day.

Common side effects include mouth sores, diarrhea, nausea, feeling weak or tired, shortness of breath, and cough. Everolimus can also cause low blood counts, increase blood lipids (cholesterol and triglycerides), and raise your blood sugar, so your doctor will check your blood work often while you are taking this drug.

**Temsirolimus (Torisel®)** is given as an intravenous (IV) infusion, typically once a week. It can be given alone.

The most common side effects of this drug are skin rash, weakness, mouth sores, diarrhea, nausea, loss of appetite, fluid build-up in the face or legs, and increases in blood sugar and cholesterol levels. Rarely, more serious side effects have been reported.

**Ridaforolimus** can be taken as a pill or given as an IV infusion. So far, is has been studied in women with endometrial cancer that has spread or come back after treatment.

Common side effects of ridaforolimus include diarrhea, mouth sores, loss of appetite, weakness, nausea, high blood sugars, and vomiting.

**More information about targeted therapy**

To learn more about how targeted drugs are used to treat cancer, see [Targeted Cancer Therapy](#)^2.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)^3.
Hyperlinks

2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html

References


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Immunotherapy for Endometrial Cancer

Immunotherapy is treatment with drugs that help a person’s own immune system better recognize and kill cancer cells. Immunotherapy can be used to treat certain types of endometrial cancer that has spread or come back (recurred).

Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking the body’s normal cells. To do this, it uses “checkpoints” – molecules on immune cells that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to avoid being attacked by the immune system. But newer drugs that target these checkpoints hold a lot of promise as cancer treatments. There are lot of clinical trials looking at how these drugs can be used to help treat endometrial cancer.

Pembrolizumab (Keytruda®) targets PD-1, a protein on immune system cells called T cells. PD-1 normally helps keep T-cells from attacking other cells in the body. By blocking PD-1, this drug boosts the immune response against cancer cells. This can shrink some tumors or slow their growth. It might be used for endometrial tumors that are not responding to other treatments or come back (recur) after treatment.

Pembrolizumab can be used in women with endometrial cancer cells that are MMR deficient (dMMR) and MSI high (MSI-H). Both of these are linked to gene mutations (changes) in the cancer cells. Tumors can be tested for these changes.

This immunotherapy drug is given as an intravenous (IV) infusion every 3 weeks.

Possible side effects

Side effects can include fatigue, fever, nausea, headache, skin rash, loss of appetite, constipation, joint/muscle pain, and diarrhea.

Other, more serious side effects occur less often. These drugs work by basically taking the brakes off the body’s immune system. Sometimes the immune system starts attacking other parts of the body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.

It’s very important to report any new side effects to your health care team right away. If you do have a serious side effects, treatment may need to be stopped and you may be...
given high doses of corticosteroids to suppress your immune system.

**More information about immunotherapy**

To learn more about how drugs that work on the immune system are used to treat cancer, see [Cancer Immunotherapy](https://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy.html)².

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)³.

**Hyperlinks**


**References**


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**Treatment Choices for Endometrial**
Cancer, by Stage

The stage (extent) of endometrial cancer is the most important factor in choosing treatment. But other factors can also affect your treatment options, including the type of cancer, your age and overall health, and whether you want to be able to have children. Tests done on the cancer cells are also used to find out if certain treatments, like hormone and targeted therapy, might work.

Surgery is the first treatment for almost all women with endometrial cancer. The operation includes removing the uterus, fallopian tubes, and ovaries. (This is called a total hysterectomy bilateral salpingo-oophorectomy or TH/BSO). Lymph nodes from the pelvis and around the aorta may also be removed (a pelvic and para-aortic lymph node dissection [LND] or sampling) and tested for cancer spread. Pelvic washings may be done, too. The tissues removed at surgery are tested to see how far the cancer has spread (the stage). Depending on the , other treatments, such as radiation and/or chemotherapy may be recommended.

For some women who still want to be able to get pregnant, surgery may be put off for a time and other treatments tried instead.

If a woman isn't well enough to have surgery, other treatments, like radiation, will be used.

Stage I cancers

Stage I is only in the uterus. It has not spread to lymph nodes or distant sites.

Stage I endometrioid cancers

Standard treatment includes surgery to remove and stage the cancer (see above). Sometimes this is the only treatment needed. The patient is then closely watched for signs that the cancer has come back (recurred).

For women with higher grade tumors, radiation will likely be recommended after surgery. Vaginal brachytherapy (VB), pelvic radiation, or both can be used.

Some younger women with early endometrial cancer may have their uterus removed without removing the ovaries. This prevents menopause and the issues that can come with it. This also increases the chance that the cancer will come back, but it doesn’t make it more likely that you will die from the cancer. This may be something that you
want to discuss with your doctor.

Women who cannot have surgery because of other medical problems or who are frail due to age are often treated with just radiation (external radiation and/or vaginal brachytherapy).

**Fertility-sparing treatment for stage IA grade 1 endometrioid cancers:** For young women who still want to have children, surgery may be postponed while progestin therapy is used to treat the cancer. Progestin treatment can cause the cancer to shrink or even go away for some time, giving the woman a chance to get pregnant. Still, this is experimental and can be risky if the patient isn’t watched closely. An endometrial biopsy or a D&C should be done every 3 to 6 months. If there’s still no cancer after 6 months, the woman can try to become pregnant. She will continue to be checked for cancer every 6 months. Because the cancer often comes back again, doctors recommend TH/BSO after childbearing is complete.

Many times, progestin treatment doesn’t work and the cancer doesn’t get better or keeps growing. Putting off surgery can give the cancer time to spread outside the uterus. If it doesn’t go away in 6 to 12 months, surgery to remove and stage the cancer is recommended (hysterectomy and removal of both fallopian tubes and ovaries).

A second opinion from a gynecologic oncologist and pathologist (to confirm the grade of the cancer) before starting progestin therapy is important. Seeing a fertility expert is also a good idea. It’s important to understand that this isn’t a standard treatment and may increase risk of cancer growth and spread.

**Other types of stage I endometrial cancers**

Cancers such as papillary serous carcinoma, clear cell carcinoma, or carcinosarcoma are more likely to have already spread outside the uterus when diagnosed. Women with these types of tumors don’t do as well as those with lower grade tumors. If the biopsy done before surgery shows a high-grade cancer, the surgery may be more extensive. Along with the total hysterectomy and removal of both fallopian tubes and ovaries, the pelvic and para-aortic lymph node will be removed, and the omentum is often removed, too.

After surgery, chemotherapy (chemo) with or without radiation therapy are given to help keep the cancer from coming back. The chemo usually includes the drugs carboplatin and paclitaxel, but other drugs can also be used.

If the cancer can’t be removed with surgery, both chemotherapy (chemo) with or without and radiation are used. Sometimes, the tumor then shrinks so that surgery can then be
done to remove it.

**Stage II cancers**

When an endometrial cancer is stage II, it has spread to the connective tissue of the cervix. But it still hasn't grown outside the uterus.

One treatment option is to have surgery first, followed by radiation therapy. The surgery includes a **radical hysterectomy** (the entire uterus, the tissues next to the uterus, and the upper part of the vagina are removed), removal of both fallopian tubes and ovaries (BSO), and pelvic and para-aortic lymph node dissection (LND) or sampling. Radiation therapy, often both vaginal brachytherapy and external pelvic radiation, may be given after the patient has recovered from surgery. Another option is to give the radiation therapy first, and then do a simple hysterectomy, BSO, and possible LND or lymph node sampling.

The lymph nodes that have been removed are checked for cancer cells. If there's cancer in them, the cancer isn't really a stage II – it's a stage IIIC.

In some cases, a woman with early stage endometrial cancer might be too frail or ill from other diseases to safely have surgery. These women are treated with external radiation and brachytherapy.

For women with high-grade cancers, like papillary serous carcinoma or clear cell carcinoma, the surgery may include omentectomy and peritoneal biopsies along with the total hysterectomy, removal of both fallopian tubes and ovaries, pelvic and para-aortic lymph node dissections, and pelvic washings. After surgery, radiation therapy, chemo, or both may be given to help keep the cancer from coming back. The chemo usually includes the drugs carboplatin and paclitaxel or possibly cisplatin and doxorubicin.

Someone with a stage II uterine carcinosarcoma often has the same type of surgery that's used for a high-grade cancer. After surgery, radiation, chemo, or both may be used. The chemo often includes paclitaxel and carboplatin but may instead include ifosfamide, along with paclitaxel or cisplatin.

**Stage III cancers**

Stage III endometrial cancers have spread outside of the uterus.

If the surgeon thinks that all visible cancer can be removed, a hysterectomy is done and
both ovaries and fallopian tubes are removed. Sometimes women with stage III cancers need a radical hysterectomy. A pelvic and para-aortic lymph node dissection may also be done. Pelvic washings will be done and the omentum may be removed. Some doctors will try to remove any remaining cancer (called debulking), but it isn’t clear that this helps patients live longer.

If tests done before surgery\(^3\) show that the cancer has spread too far to be removed completely, in rare cases, radiation therapy may be given before any surgery. It might shrink the tumor enough to make surgery an option.

**Stage IIIA:** A cancer stage IIIA has spread to the tissue covering the uterus (the serosa) or to other tissues in the pelvis, like the fallopian tubes or the ovaries (the adnexa). For these cancers, treatment after surgery may include chemo, radiation, or both. Radiation is given to the pelvis or to both the abdomen (belly) and pelvis. Vaginal brachytherapy is often used, too.

**Stage IIIB:** In this stage, the cancer has spread to the vagina. After surgery, stage IIIB may be treated with chemo and/or radiation.

**Stage IIIC:** This includes cancers that have spread to the lymph nodes in the pelvis (stage IIIC1) and those that have spread to the lymph nodes around the aorta (stage IIIC2). Treatment includes surgery, followed by chemo and/or radiation.

For women with high-grade cancers, such as papillary serous carcinoma or clear cell carcinoma, the surgery may include omentectomy and peritoneal biopsies along with the total hysterectomy, removal of both ovaries and fallopian tubes, pelvic and para-aortic lymph node dissections, and pelvic washings. After surgery, chemo, radiation therapy, or both may be given to help keep the cancer from coming back. The chemo usually includes the drugs carboplatin and paclitaxel or cisplatin and doxorubicin.

Women with stage III uterine carcinosarcoma often have the same type of surgery that’s used for a high-grade cancer. After surgery, radiation, chemo, or both may be used. The chemo often includes the drug paclitaxel and carboplatin, but ifosfamide, along with paclitaxel or cisplatin may be used. Targeted and/or immunotherapy may also be options for some women.

**Stage IV cancers**

**Stage IVA:** These endometrial cancers have grown into the bladder or bowel.

**Stage IVB:** These endometrial cancers have spread to lymph nodes outside the pelvis.
or para-aortic area. This stage also includes cancers that have spread to the liver, lungs, omentum, or other organs.

Some endometrial cancers are stage IV because they have spread to lymph nodes in the abdomen (and not just the pelvis and para-aortic area), but they haven’t spread to any other areas. Women with this kind of cancer spread may have better outcomes if all the cancer that’s seen can be removed (debulked) and biopsies of other areas in the abdomen do not show cancer cells.

In most cases of stage IV endometrial cancer, the cancer has spread too far for it all to be removed with surgery. A hysterectomy and removal of both fallopian tubes and ovaries may still be done to prevent excessive bleeding. Radiation therapy may also be used for this reason. When the cancer has spread to other parts of the body, hormone therapy may be used. But high-grade cancers and those without detectable progesterone and estrogen receptors on the cancer cells are not likely to respond to hormone therapy. Targeted and immunotherapy may also be options.

Combinations of chemo drugs may help some women for a time. The drugs used most often are paclitaxel, doxorubicin, and either carboplatin or cisplatin. These drugs are often used together in combination. Stage IV carcinosarcoma is often treated with much the same chemo. Cisplatin, ifosfamide, and paclitaxel may also be combined. Women with stage IV endometrial cancer should consider taking part in clinical trials of chemotherapy or other new treatments.

**Recurrent endometrial cancer**

Cancer is called recurrent when it come backs after treatment. Recurrence can be local (in or near the same place it started) or distant (spread to organs such as the lungs or bone). Treatment depends on the amount of cancer and where it is, as well as the kind of treatment was used the first time.

For local recurrences, such as in the pelvis, surgery (sometimes followed with radiation therapy) is used. For women who have other medical conditions that make them unable to have surgery, radiation therapy alone or combined with hormone therapy tends to be used.

For a distant recurrence, surgery and/or focused radiation therapy may be used when the cancer is only in a few small spots (like in the lungs or bones). Women with more extensive recurrences (widespread cancer) are treated like those with stage IV endometrial cancer. Either hormone therapy or chemo is recommended. Low-grade cancers containing progesterone receptors are more likely to respond well to hormone
therapy. Higher-grade cancers and those without detectable receptors are unlikely to shrink during hormone therapy but may respond to chemo. Targeted therapy\(^5\) and immunotherapy\(^6\) may be used in some cases. Clinical trials\(^7\) of new treatments are another good option.

**Hyperlinks**


**References**


See all references for Endometrial Cancer ([www.cancer.org/cancer/endometrial-cancer/references.html](http://www.cancer.org/cancer/endometrial-cancer/references.html))

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Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

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After Endometrial Cancer Treatment

Living as a Cancer Survivor

For many people, cancer treatment leads to questions about the next steps as a survivor or about the chances of the cancer coming back.

- Living as an Endometrial Cancer Survivor

Cancer Concerns After Treatment

Treatment may remove or destroy the cancer, but it's very common to worry about the risk of developing another cancer.

- Second Cancers After Endometrial Cancer

Living as an Endometrial Cancer Survivor

For many women with endometrial cancer, treatment may remove or destroy the cancer. Completing treatment can be both stressful and exciting. You may be relieved to finish treatment, but find it hard not to worry about cancer coming back. (When cancer comes back after treatment, it's called recurrence.) This is a very common concern in people who have had cancer.
For other women, this cancer may never go away completely\textsuperscript{2}. They may get regular treatments with chemotherapy, radiation, or other therapies to try to help keep the cancer in check. Learning to live with cancer that doesn't go away can be difficult and very stressful.

**Follow-up care**

When treatment ends, your doctors will still want to watch you closely. It’s very important to go to all of your follow-up appointments. During these visits, your doctors will ask questions about any problems you may have and may do physical exams, blood tests, or x-rays and scans to look for signs of cancer or treatment side effects\textsuperscript{3}. Almost any cancer treatment can have side effects. Some may last for a few weeks to months, but others can last the rest of your life. This is the time for you to talk to your cancer care team about any changes or problems you notice and any questions or concerns you have.

Talk to your doctor about signs of recurrence you should watch for. If you notice any of these changes, see your doctor right away, don’t wait until your next appointment:

- Bleeding (from you vagina, bladder, or rectum)
- Decreased appetite
- Unexplained weight loss
- Pain (in your pelvis, hips, belly, or back)
- Cough
- Feeling short of breath
- Swelling in your belly or legs

**Doctor visits and tests**

Endometrial cancer is most likely to come back within the first few years after treatment, so an important part of your treatment plan is a specific schedule of follow-up visits after treatment ends. How often you need to be seen depends mostly on what stage\textsuperscript{4} and grade the cancer was.

- For most women who had endometrial cancer, experts recommend a physical exam every 3 to 6 months for the first 2 to 3 years, then every 6 or 12 months after that. Imaging tests should be done based on the physical exam and any changes the patient reports.
- For women with higher stage or grade cancers (stages III or IV, or cancers that
were grade III, including papillary serous, clear cell, and carcinosarcomas), experts recommend that, along with physical exams, a CT scan of the chest, abdomen (belly), and pelvis is done every 6 months for the first 3 years, then every 6 to 12 months for at least the next 2 years.

During each follow-up visit, the doctor will do a pelvic exam (using a speculum) and check for any enlarged lymph nodes in the groin area. A Pap test may also be done to look for cancer cells in the upper part of the vagina, near the area where the uterus used to be. But this is no longer recommended as part of routine follow-up due to the low chance of detecting a recurrence. Sometimes a CA 125 blood test is done as a part of follow-up, but this is also not needed in all patients. The doctor will also ask about any symptoms that might point to cancer recurrence or side effects of treatment. Most endometrial cancer recurrences are found because of symptoms, so it’s very important that you tell your doctor exactly how you’re feeling.

If symptoms or the physical exam suggests the cancer might have come back, imaging tests (such as CT scans or ultrasounds), a CA 125 blood test, and/or biopsies may be done. Studies of many women with endometrial cancer show that if no symptoms or physical exam changes are present, routine blood tests and imaging tests aren’t needed.

**Ask your doctor for a survivorship care plan**

Talk with your doctor about developing a survivorship care plan for you. This plan might include:

- A suggested schedule for follow-up exams and tests
- A list of potential late or long-term side effects from your treatment, including what to watch for and when you should contact your doctor
- A schedule for other tests you might need, such as tests to look for long-term health effects from your cancer or its treatment
- Suggestions for things you can do that might improve your health, including possibly lowering your chances of the cancer coming back

**Keeping health insurance and copies of your medical records**

Even after treatment, it’s very important to keep health insurance. Tests and doctor visits cost a lot, and even though no one wants to think of their cancer coming back, this
could happen.

At some point after your cancer treatment, you might find yourself seeing a new doctor who doesn’t know about your medical history. It’s important to keep copies of your medical records to give your new doctor the details of your diagnosis and treatment. Learn more in Keeping Copies of Important Medical Records.⁶

**Can I lower the risk of endometrial cancer progressing or coming back?**

If you have (or have had) endometrial cancer, you probably want to know if there are things you can do that might lower your risk of the cancer growing or coming back, such as exercising, eating a certain type of diet, or taking nutritional supplements. Unfortunately, it’s not yet clear if there are things you can do that will help.

Adopting healthy behaviors such as [not smoking]⁷, [eating well]⁸, [getting regular physical activity]⁹, and [staying at a healthy weight]¹⁰ might help, but no one knows for sure. Still, we do know that these types of changes can have positive effects on your health that can extend beyond your risk of endometrial cancer or other cancers.

**About dietary supplements**

So far, no [dietary supplements]¹¹ (including vitamins, minerals, and herbal products) have been shown to clearly help lower the risk of endometrial cancer progressing or coming back. This doesn’t mean that no supplements will help, but it’s important to know that none have been proven to do so.

Dietary supplements are not regulated like medicines in the United States – they don’t have to be proven effective (or even safe) before being sold, although there are limits on what they’re allowed to claim they can do. If you’re thinking about taking any type of nutritional supplement, talk to your health care team. They can help you decide which ones you can use safely while avoiding those that might be harmful.

**If the cancer comes back**

If cancer does come back at some point, your treatment options will depend on where the cancer is, what treatments you’ve had before, and your health. Surgery, radiation therapy, chemotherapy, targeted therapy, immunotherapy, or some combination of these might be options. Other types of treatment might also be used to help relieve any symptoms from the cancer.
For more on how recurrent cancer is treated, see Treatment Choices of Endometrial Cancer, by Stage\(^2\). For more general information see Understanding Recurrence\(^3\).

**Could I get a second cancer after endometrial cancer?**

People who’ve had endometrial cancer can still get other cancers. In fact, endometrial cancer survivors are at risk for getting certain other types of cancer. Learn more in Second Cancers After Endometrial Cancer.

**Getting emotional support**

Some amount of feeling depressed, anxious, or worried is normal when cancer is a part of your life. Some people are affected more than others. But everyone can benefit from help and support from other people, whether friends and family, religious groups, support groups, professional counselors, or others. Learn more in Life After Cancer\(^4\).

**Hyperlinks**

Second Cancers After Endometrial Cancer

Endometrial cancer survivors can be affected by a number of health problems, but often their greatest concern is facing cancer again. Cancer that comes back after treatment is called a recurrence. But some cancer survivors may develop a new, unrelated cancer later. This is called a second cancer.

No matter what type of cancer you have had, it's still possible to get another (new) cancer, even after surviving the first. People who have had endometrial cancer can still get the same types of cancers that other people get. In fact, certain types of endometrial cancer and cancer treatments are linked to a higher risk of certain second cancers compared to the general population. For instance, studies have shown that women who had high-grade endometrioid, serous, carcinosarcoma, and mixed epithelioid cancers are at higher risk for certain second cancers than women with low-grade or clear cell
types.

Survivors of endometrial cancer can get any type of second cancer, but they have an increased risk of:

- Breast cancer¹
- Colon cancer²
- Rectal cancer³
- Lung cancer⁴
- Lymphoma⁵
- Bladder cancer⁶
- Kidney cancer⁷
- Vaginal cancer⁸
- Soft tissue cancer⁹
- Acute leukemia¹⁰

Colon and breast cancers are the second cancers most often seen.

The increased risks of acute myeloid leukemia (AML) and cancers of the colon, rectum, bladder, vagina, and soft tissue seem to be linked to treatment with radiation.

See Second Cancers in Adults¹¹ for more information about causes of second cancers.

**Follow-up after endometrial cancer treatment**

After completing treatment, you should still see your doctor regularly. Tell them any new symptoms or problems. They could be caused by the cancer spreading or coming back, or by a new disease or a second cancer.

Endometrial cancer survivors should also follow the American Cancer Society guidelines for the early detection of cancer¹², such as those for colorectal, breast, and cervical cancer. Screening tests can find some cancers early, when they are easier to treat. For women who’ve had endometrial cancer, most experts don’t recommend any extra testing to look for second cancers unless you have symptoms.

**Can I lower my risk of getting a second cancer?**

There are steps you can take to lower your risk and stay as healthy as possible. To help maintain good health, endometrial cancer survivors should:
• Try to get to and stay at a healthy weight\textsuperscript{13}
• Stay physically active\textsuperscript{14}
• Eat a healthy diet\textsuperscript{15}, with an emphasis on plant foods
• Limit alcohol\textsuperscript{16} to no more than 1 drink per day

These steps can help lower the risk of some other health problems, too.

See Second Cancers in Adults\textsuperscript{17} for more information about causes of second cancers.

Hyperlinks


References


See all references for Endometrial Cancer (www.cancer.org/cancer/endometrial-cancer/references.html)

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