

Endometrial cancer refers to **cancer of the lining of the uterus**. This inner lining is called the endometrium, and is the same lining that is shed monthly during menstruation.

It is the most common gynaecologic cancer in North America. The lifetime risk of developing endometrial cancer is 2.6%, and this average risk may be affected by several different risk factors. Endometrial cancer can be grouped into two separate types, each with unique risk factors.

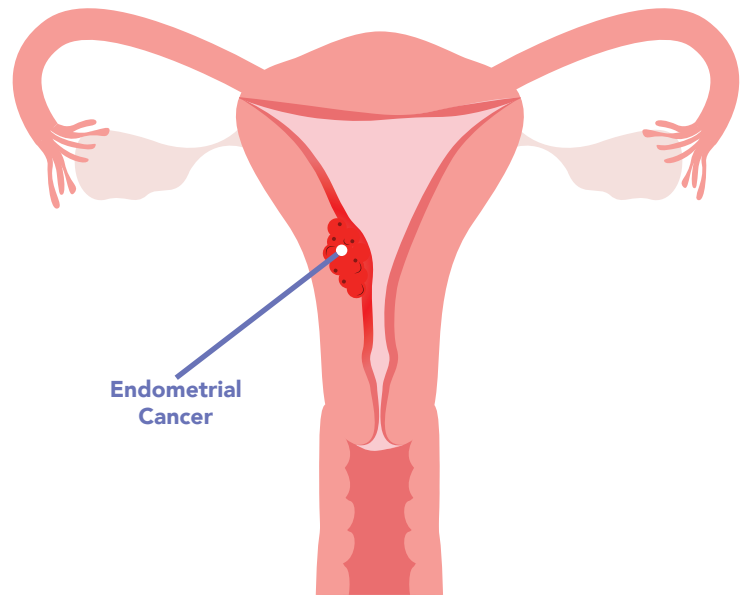
Risk Factors for Endometrial Cancer

TYPE I ENDOMETRIAL CANCER

Type I Endometrial Cancer is the most commonly occurring type, accounting for up to 80% of cases of endometrial cancer. This type of endometrial cancer is generally thought of as hormone-related (usually related to excess estrogens), and can also be referred to as **endometrioid** endometrial cancer. This type of cancer comes in three grades (grade 1, 2 or 3). Grade 1 cancer is least aggressive form, whereas grade 3 is the most aggressive.

Some of the specific **risk factors** for Type I Endometrial Cancer include:

- Obesity
- Advancing age
- High blood pressure
- Diabetes
- Never having been pregnant
- Early onset of menstruation
- Late menopause (older than age 55)
- Polycystic ovarian syndrome (PCOS)
- Use of estrogen by oral pill, patch, or gel *without progesterone in women who still have a uterus*
- High blood pressure
- Tamoxifen use (this is a drug used as maintenance therapy in some breast cancer patients)
- Genetic syndromes (e.g. HNPCC or "Lynch" syndrome, which confers the highest lifetime risk, about 10 times higher than the average woman; other genetic syndromes can increase this risk as well)



TYPE II ENDOMETRIAL CANCER

Type II Endometrial Cancer accounts for up to 20% of endometrial cancer cases. Subtypes of Type II Endometrial cancers include **papillary serous, clear cell, mucinous, and carcinosarcoma**. These types of cancers are not thought to be associated with hormone exposure.

Some of the specific **risk factors** for Type II Endometrial Cancer include:

- Advancing age
- Black race (specifically for *serous endometrial cancer*)
- Genetic mutations such as BRCA1

Symptoms of Endometrial Cancer

ABNORMAL BLEEDING is the most common symptom of Endometrial Cancer
(occurring in up to 95% of patients)

PREMENOPAUSAL

In people who are still menstruating, this may manifest as increased flow or frequency of periods or bleeding between periods

POSTMENOPAUSAL

In people who have experienced menopause (over 12 months since last period), abnormal bleeding is postmenopausal bleeding

A minority of people (5%) will not have abnormal bleeding or discharge, and endometrial cancers may be alternatively diagnosed through other investigations, including:

- Abnormal Pap test
- Abnormal appearance of endometrium (uterine lining) on imaging for other (sometimes unrelated) reasons
- Abnormal pathology at the time of hysterectomy or dilation and curettage (D&C) for unrelated reasons

Diagnosing Endometrial Cancer

Bloodwork Investigations

Endometrial cancer **cannot** be diagnosed using bloodwork.

Imaging

Pelvic (Transabdominal and Transvaginal) Ultrasound may be ordered to evaluate the uterine lining.

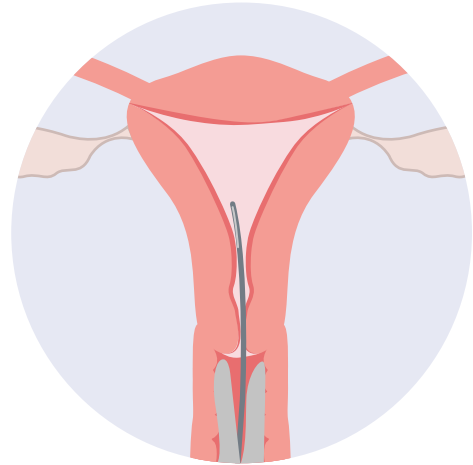
- In a postmenopausal woman, a thin endometrial lining (<5 mm) is associated with a lower risk of endometrial cancer compared to those whose endometrial lining is thicker than 5 mm.
- However, endometrial cancer may exist even in the presence of a normal-appearing endometrium. As such, **a normal ultrasound does not rule out endometrial cancer.**
- Your doctor may also suggest a **sonohysterogram** to delineate the uterine cavity. This is a special ultrasound procedure that typically involves injection of fluid through the cervix and into the uterine cavity. Results of sonohysterogram may determine next steps with respect to tissue sampling.



The most accurate way to diagnose endometrial cancer is by taking a sample of the lining of the uterus. This can usually be achieved in the office or in the operating room.

Endometrial Biopsies may be performed in the office to directly assess the cells of the uterine lining

- An endometrial biopsy involves using a speculum to visualize the cervix, and introducing a thin plastic tube through the cervix which collects a sample of the lining of the uterus.
- The setup for this procedure is similar to a Pap smear, however the procedure is usually more uncomfortable than a Pap, because the thin plastic tube (called a pipelle) must enter from the cervix into the uterus, whereas a Pap samples the cervix only.
- An endometrial biopsy can be associated with cramping and bleeding, however it is a short procedure (usually only a few minutes).



Alternatively, the endometrium can be sampled through a short procedure called a dilation and curettage and/or operative hysteroscopy. These procedures typically take place in the Operating Room while the patient is asleep. These procedures are typically performed when an endometrial biopsy cannot be obtained in the office or directed sampling is required through a hysteroscopic procedure. Your doctor can discuss what options are right for you.



Operative Hysteroscopy
to allow for directed sampling

References

1. Renaud MC, Le T. No. 291-Epidemiology and investigations for suspected endometrial cancer. J Obstet Gynaecol Can. 2018 Sept;40(9):703-711.

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