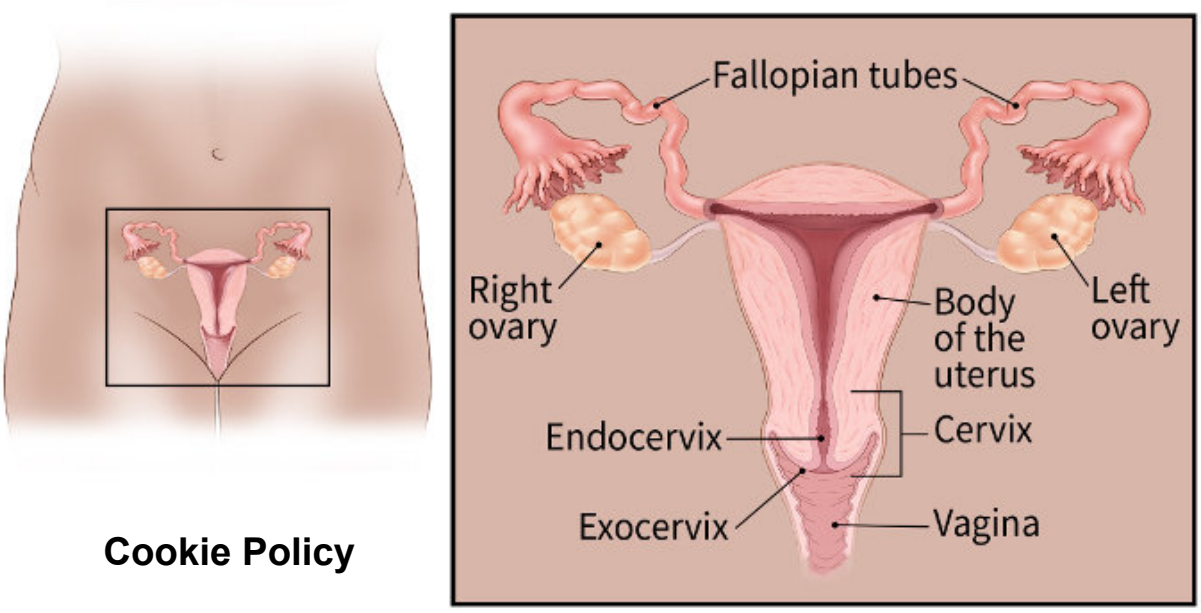
What Is Cervical Cancer?

Cervical cancer starts in the cells lining the cervix -- the lower part of the uterus (womb). The cervix connects the body of the uterus (the upper part where a fetus grows) to the vagina (birth canal). Cancer starts when cells in the body begin to grow out of control. To learn more about how cancers start and spread, see What Is Cancer?

The cervix is made of two parts and is covered with two different types of cells.

- The **endocervix** is the opening of the cervix that leads into the uterus. It is covered with **glandular** cells.
- The **exocervix (or ectocervix)** is the outer part of the cervix that can be seen by the doctor during a speculum exam. It is covered in **squamous** cells.

The place where these two cell types meet in the cervix is called the **transformation zone**. The exact location of the transformation zone changes as you get older and if you give birth. Most cervical cancers begin in the cells in the transformation zone.



Pre-cancers of the cervix

Cells in the transformation zone do not suddenly change into cancer. Instead, the normal cells of the cervix first gradually develop abnormal changes that are called pre-cancerous. Doctors use several terms to describe these pre-cancerous changes, including **cervical intraepithelial neoplasia (CIN)**, **squamous intraepithelial lesion (SIL)**, and **dysplasia**.

When the pre-cancers are checked in the lab, they are graded on a scale of 1 to 3 based on how much of the cervical tissue looks abnormal.

- In CIN1 (also called mild dysplasia or low grade SIL), not much of the tissue looks abnormal, and it is considered the least serious cervical pre-cancer.
- In CIN2 or CIN3 (also called moderate/severe dysplasia or high-grade SIL) more of the tissue looks abnormal; high-grade SIL is the most serious pre-cancer.

Although cervical cancers start from cells with pre-cancerous changes (pre-cancers), only some of the women with pre-cancers of the cervix will develop cancer. For most women, pre-cancerous cells will go away without any treatment. But, in some women pre-cancers turn into true (invasive) cancers. Treating cervical pre-cancers can prevent almost all cervical cancers.

The goal of cervical cancer screening is to find pre-cancer or cancer early when it is more treatable and curable. Regular screening can prevent cervical cancers and save lives. The tests for cervical cancer screening are the HPV test and the Pap test. Pre-cancerous changes can be detected by the Pap test and treated to prevent cancer from developing. The HPV test looks for infection by high-risk types of HPV that are more likely to cause pre-cancers and cancers of the cervix. HPV infection has no treatment, but a vaccine can help prevent it.

See Can Cervical Cancer Be Prevented? The specific types of treatment for abnormal screening tests are discussed in When Cervical Screening Test Results are Abnormal.

Types of cervical cancer

Cervical cancers and cervical pre-cancers are classified by how they look in the lab s with a microscope. The main types of cervical cancers are **squamous cell carcinoma** and **adenocarcinoma**.

- Most (up to 9 out of 10) cervical cancers are **squamous cell carcinomas**. These cancers develop from cells in the exocervix. Squamous cell carcinomas most often begin in the transformation zone (where the exocervix joins the endocervix).
- Most of the other cervical cancers are **adenocarcinomas**. Adenocarcinomas are cancers that develop from glandular cells. Cervical adenocarcinoma develops from the mucus-producing gland cells of the endocervix.
- Less commonly, cervical cancers have features of both squamous cell carcinomas and adenocarcinomas. These are called **adenosquamous carcinomas** or **mixed carcinomas**.

Although almost all cervical cancers are either squamous cell carcinomas or adenocarcinomas, other types of cancer also can develop in the cervix. These other types, such as melanoma, sarcoma, and lymphoma, occur more commonly in other parts of the body.

Only the more common cervical cancer types are covered here.

References

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