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About Cervical Cancer

Get an overview of cervical cancer and the latest key statistics in the US.

Overview and Types

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

- [What Is Cervical Cancer?](#)

Research and Statistics

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

- [Key Statistics for Cervical Cancer](#)
- [What's New in Cervical Cancer Research?](#)

What Is Cervical Cancer?

- [Abnormal changes in cells of the cervix](#)
- [Types of 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?](#)¹

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.



Abnormal changes in cells 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 can turn into cancer. Doctors use several terms to describe these cell changes, including **cervical intraepithelial neoplasia (CIN)**, **squamous intraepithelial lesion (SIL)**, and **dysplasia**. You might hear these abnormal changes referred to as pre-cancers or pre-cancer changes.

When these abnormal changes in the cervix are found, 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. Most often, these cells will change back to normal cells.
- In CIN2 or CIN3 (also called moderate/severe dysplasia or high-grade SIL) more of the tissue looks abnormal. With these cell changes, there is higher risk that the cells can become cancer cells and will need to be watched closely or removed.

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

The goal of [cervical cancer screening](#)² is to find abnormal cells in the cervix or cervical 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](#)³ and treated to prevent cancer from developing. The [HPV test](#)⁴ 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?](#)⁵ The specific types of treatment for abnormal screening tests are discussed in [When Cervical Screening Test Results are Abnormal](#)⁶.

Types of cervical cancer

Cervical cancers and cervical pre-cancers are classified by how they look in the lab 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**

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National Cancer Institute. Physician Data Query (PDQ). Cervical Cancer Treatment – Health Professional Version. 2019. <https://www.cancer.gov/types/cervical/hp/cervical-treatment-pdq>. Updated February 6, 2019. Accessed on October 30, 2019.

Last Revised: August 23, 2023

Key Statistics for Cervical Cancer

- [How common is cervical cancer?](#)
- [Incidence rates for cervical cancer](#)
- [Mortality rates for cervical cancer](#)

How common is cervical cancer?

The American Cancer Society's estimates for cervical cancer in the United States for 2024 are:

- About 13,820 new cases of invasive cervical cancer will be diagnosed.
- About 4,360 women will die from cervical cancer.

Cervical pre-cancers are diagnosed far more often than invasive cervical cancer.

Cervical cancer is most frequently diagnosed in women between the ages of 35 and 44, with the average age being 50. It rarely develops in women younger than 20.

Many older women don't realize that they are still at risk of developing cervical cancer as they age. More than 20% of cervical cancers are found in women over 65. However, these cancers rarely occur in women who have been getting regular tests to screen for

cervical cancer before they were 65. See [Can Cervical Cancer Be Prevented?](#)¹ and [Cervical Cancer Screening Tests](#)² to learn more about tests used to screen for cervical cancer.

Incidence rates for cervical cancer

Cervical cancer incidence rates decreased by more than half from the mid-1970s to the mid-2000s, largely because of the increased use of screening, but they have stabilized over the past decade. However, in women ages 30-44, rates have increased 1.7% each year from 2012 to 2019.

In contrast, rates declined 11% each year for women ages 20-24, probably reflecting the first signs of cancer prevention from HPV vaccination.

Mortality rates for cervical cancer

Cervical cancer was once one of the most common causes of cancer death for American women. The cervical cancer death rate has dropped by more than half since the mid-1970s because of prevention and screening, although rates have stabilized in recent years. The death rate in Black women and Native American women is about 65% higher than in White women.

Visit the [American Cancer Society's Cancer Statistics Center](#)³ for more key statistics.

Hyperlinks

1. www.cancer.org/cancer/types/cervical-cancer/causes-risks-prevention/prevention.html
2. www.cancer.org/cancer/types/cervical-cancer/detection-diagnosis-staging/screening-tests.html
3. cancerstatisticscenter.cancer.org/

References

What's New in Cervical Cancer Research?

with earlier-stage disease.

Targeted therapy

Current targeted therapy includes finding cells with changes in the *RET* and *NTRK* genes. Scientists are studying how other gene mutations found in cervical cancer cells can be targeted by specific drugs. Genes called oncogenes and tumor suppressor genes, which control cell growth, are of particular interest.

Radiation therapy

Studies are being done to determine the best ways to use external beam therapy and brachytherapy to treat cervical cancer and still limit damage to normal tissue. Doctors are also looking for ways to use more focused radiation along with other treatments, like [immunotherapy](#),¹ to treat advanced cervical cancers.

Chemotherapy

1. www.cancer.org/cancer/types/cervical-cancer/treating/immunotherapy.html
2. www.cancer.org/cancer/risk-prevention/hpv/hpv-vaccines.html

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Last Revised: June 28, 2024

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