

# Cervical Cancer Basics

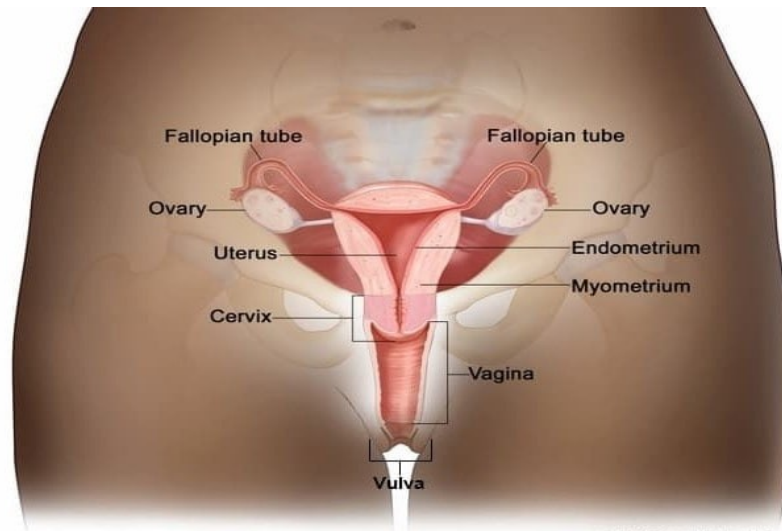
## Key points

- Cervical cancer is a disease in which cells in the cervix grow out of control.
- Anyone with a cervix is at risk for cervical cancer.



## What it is

Cervical cancer is a disease in which cells in the cervix grow out of control. The cervix connects the vagina (birth canal) to the upper part of the uterus. The uterus (or womb) is where a baby grows during pregnancy.



This diagram shows different parts of the female reproductive system. © 2021 Terese Winslow LLC. US government has certain rights. Used with permission. Contact artist at [www.teresewinslow.com](http://www.teresewinslow.com) for licensing.

Anyone with a cervix is at risk for cervical cancer. It occurs most often in people over age 30. Long-lasting infection with certain [types of human papillomavirus \(HPV\)](#) is the main cause of cervical cancer. HPV is a common virus that is passed from one person to another during sex. At least half of sexually active people will have HPV at some point in their lives, but few will get cervical cancer.

[Screening tests](#) and the HPV vaccine can help prevent cervical cancer. When cervical cancer is found early, it is highly treatable and associated with long survival and good quality of life.

## Symptoms of Cervical Cancer

### Key points

- Early on, cervical cancer may not cause symptoms.
- Advanced cervical cancer may cause bleeding or discharge from the vagina that is not normal for you.
- If you have unusual vaginal bleeding, see a doctor right away.
- Advanced cervical cancer may cause bleeding or discharge from the vagina that is not normal for you, such as bleeding after sex.
- If you have any of these signs, see your doctor. They may be caused by something other than cancer, but the only way to know is to see your doctor.

[This video](#) discusses the importance of knowing the signs and symptoms of gynecologic cancer.

[https://www.youtube.com/watch?v=UGwd7QfjkbI&embeds\\_referring\\_euri=https%3A%2F%2Fwww.cdc.gov%2F&embeds\\_referring\\_origin=https%3A%2F%2Fwww.cdc.gov%3Fautohide%3D0](https://www.youtube.com/watch?v=UGwd7QfjkbI&embeds_referring_euri=https%3A%2F%2Fwww.cdc.gov%2F&embeds_referring_origin=https%3A%2F%2Fwww.cdc.gov%3Fautohide%3D0)

## Screening for Cervical Cancer

### Key points

- The HPV test and the Pap test can help prevent cervical cancer or find it early.
- You should start getting Pap tests at age 21. If you are 30 years old or older, talk to your doctor about testing options.

### Screening tests

The HPV test and the Pap test can help prevent cervical cancer or find it early.

- The **HPV test** looks for the virus ([human papillomavirus](#)) that can cause cell changes on the cervix.
- The **Pap test** (or Pap smear) looks for precancers, cell changes on the cervix that might become cervical cancer if they are not treated appropriately.

Both tests can be done in a doctor's office or clinic. During the Pap test, the doctor will use a plastic or metal instrument, called a speculum, to look inside your vagina. This helps the doctor examine the vagina and the cervix, and collect a few cells and mucus from the cervix and the area around it. The cells are sent to a laboratory.

- If you are getting a Pap test, the cells will be checked to see if they look normal.
- If you are getting an HPV test, the cells will be tested for HPV.

**What is cervical precancer?** When there are cervical cells that look abnormal but are not yet cancerous, it is called cervical precancer. These abnormal cells may be the first sign of cancer that develops years later. Cervical precancer usually doesn't cause pain or other symptoms. It is found with a Pap test.

## When to get screened

### If you are 21 to 29 years old

You should start getting Pap tests at age 21. If your Pap test result is normal, your doctor may tell you that you can wait three years until your next Pap test.

### If you are 30 to 65 years old

Talk to your doctor about which testing option is right for you:

- **An HPV test only.** This is called primary HPV testing. If your result is normal, your doctor may tell you that you can wait five years until your next screening test.
- **An HPV test along with a Pap test.** This is called co-testing. If both of your results are normal, your doctor may tell you that you can wait five years until your next screening test.
- **A Pap test only.** If your result is normal, your doctor may tell you that you can wait three years until your next Pap test.

### If you are older than 65

Your doctor may tell you that you don't need to be screened anymore if:

- You have had at least three Pap tests or two HPV tests in the past 10 years, and the test results were normal or negative, and
- You have not had a cervical precancer in the past, or

- You have had your cervix removed as part of a total hysterectomy for non-cancerous conditions, like fibroids.

## Are you worried about the cost?

CDC offers free or low-cost cervical cancer screening tests through the National Breast and Cervical Cancer Early Detection Program.

[Find out if you qualify.](#)

## How to prepare for your test

No special preparation is needed before you have an HPV test.

If you are getting a Pap test, you can take steps to make sure the test results are accurate. Avoid intercourse, douching, and using vaginal medicines or spermicidal foam for 2 days before the test. If you had sex before the test, go to the appointment as planned and let the doctor know.

If you have your period, don't worry. Both tests can still be done at this time.

## Test results

It can take as long as three weeks to receive your test results. If your test shows that something might not be normal, your doctor will contact you and figure out how best to follow up. There are many reasons why test results might not be normal. It usually does not mean you have cancer.

If your test results show cells that are not normal and may become cancer, your doctor will let you know if you need to be treated. In most cases, treatment prevents cervical cancer from developing. It is important to follow up with your doctor right away to learn more about your test results and receive any treatment that may be needed.

If your test results are normal, your chance of getting cervical cancer in the next few years is very low. Your doctor may tell you that you can wait several years for your next cervical cancer screening test. But you should still go to the doctor regularly for a checkup.

## Pap test result

A Pap test result can be normal, unclear, abnormal, or unsatisfactory.

- A **normal** (or "negative") result means that no cell changes were found on your cervix. This is good news. But you still need to get Pap tests in the future. New cell changes can still form on your cervix. Your doctor may tell you that you can wait three years for your next screening test if you received a Pap test only. If you also received an HPV test, and the result is negative, your doctor may tell you that you can wait five years for your next screening test.

- It is common for test results to come back **unclear**. Your doctor may use other words to describe this result, like equivocal, inconclusive, or ASC-US. These all mean the same thing—that your cervical cells look like they could be abnormal. It is not clear if it's related to HPV. It could be related to life changes like pregnancy, menopause, or an infection. The HPV test can help find out if your cell changes are related to HPV. Ask your doctor what to do next.
- An **abnormal** result means that cell changes were found on your cervix. This usually does not mean that you have cervical cancer. Abnormal changes on your cervix are likely caused by HPV. The changes may be minor (low-grade) or serious (high-grade). Most of the time, minor changes go back to normal on their own. But more serious changes can turn into cancer if they are not removed. The more serious changes are often called "precancer" because they are not yet cancer, but they can turn into cancer over time. In rare cases, an abnormal Pap test can show that you may have cancer. You will need other tests to be sure. The earlier you find cervical cancer, the easier it is to treat.
- If there are not enough cells in the sample or the cells are clumped together, this is considered **unsatisfactory**. Your doctor may ask you to come back for another Pap test in a few months.

## HPV test result

An HPV test result can be positive or negative.

- A **negative** HPV test means you do not have an HPV type that is linked to cervical cancer. Your doctor may tell you that you can wait five years for your next screening test.
- A **positive** HPV test means you do have an HPV type that may be linked to cervical cancer. This does not mean you have cervical cancer now. But it could be a warning. The specific HPV type may be identified to determine the next step.

## Resources

- [Cervical Cancer Screening Recommendation Statement \(US Preventive Services Task Force\)](#)
- [Next Steps after an Abnormal Cervical Cancer Screening Test: Understanding HPV and Pap Test Results](#) (National Cancer Institute)

# Cervical Cancer Risk Factors

## Key points

- Almost all cervical cancers are caused by human papillomavirus (HPV).
- Other things can increase your risk of cervical cancer.

## Conditions that can increase risk

Almost all [cervical cancers are caused by human papillomavirus \(HPV\)](#), a common virus that can be passed from one person to another during sex. There are many types of HPV. Some HPV types can cause changes on your cervix that can lead to cervical cancer over time, while other types can cause genital or skin warts.

HPV is so common that most people get it at some time in their lives. HPV usually causes no symptoms, so you can't tell that you have it. For most people, HPV will go away on its own. If it doesn't, it can cause cervical cancer over time.

Other things can increase your risk of cervical cancer:

- Having HIV (the virus that causes AIDS) or another condition that makes it hard for your body to fight off health problems.
- [Tobacco smoking](#).

## Reducing Risk for Cervical Cancer

### Key points

- The HPV vaccine protects against the types of HPV that most often cause cervical cancer.
- Two screening tests can help find changes that could become cervical cancer.

### Steps you can take

#### Human papillomavirus (HPV) vaccine

The HPV vaccine protects against the [types of HPV](#) that most often cause cervical, vaginal, and vulvar cancers.

- HPV vaccination is recommended for preteens aged 11 to 12 years, but can be given starting at age 9.
- HPV vaccination also is recommended for everyone through age 26 years, if they are not vaccinated already.
- HPV vaccination is not recommended for everyone older than age 26 years. However, some adults age 27 through 45 years who are not already vaccinated may decide to get the HPV vaccine after speaking with their doctor about their risk for new HPV infections and the possible benefits of vaccination. HPV vaccination in this age range provides less benefit, as more people have already been exposed to HPV.

If vaccination is started before age 15, a two-dose schedule is recommended, with the doses given 6 to 12 months apart. For people who start the series after their 15th birthday, the vaccine is given in a series of three shots.

HPV vaccination prevents new HPV infections, but does not treat existing infections or diseases. This is why the HPV vaccine works best when given before any exposure to HPV. You should get screened for cervical cancer regularly, even if you received an HPV vaccine.

## Screening tests

Two [screening tests](#) can help find changes that could become precancer or cervical cancer:

- The Pap test (or Pap smear) looks for precancers, cell changes on the cervix that might become cervical cancer if they are not treated appropriately.
- The HPV test looks for the virus ([human papillomavirus](#)) that can cause these cell changes.

[More steps to help prevent cervical cancer](#)

These things may also help lower your risk for cervical cancer:

- Don't smoke.
- Use condoms during sex.\*

\*HPV infection can occur in both male and female genital areas that are covered or protected by a latex condom, as well as in areas that are not covered. While the effect of condoms in preventing HPV infection is unknown, condom use has been associated with a lower rate of cervical cancer.

# Treatment of Cervical Cancer

## Key points

- Cervical cancer can be treated in several ways. It depends on the type of cervical cancer and how far it has spread.
- Treatments include surgery, chemotherapy, and radiation therapy.
- If your doctor says that you have cervical cancer, ask to be referred to a gynecologic oncologist.

## Overview

If your doctor says that you have cervical cancer, ask to be referred to a gynecologic oncologist—a doctor who has been trained to treat gynecologic cancers, including cervical cancer. This doctor will work with you to create a treatment plan.

## Treatment options

The extent of disease is referred to as the stage. Information about the size of the cancer or how far it has spread is often used to determine the stage. Doctors use this information to plan treatment and to monitor progress.

Cervical cancer is treated in several ways. It depends on the kind of cervical cancer and how far it has spread.

Cancer treatment may include:

- **Surgery:** An operation in which doctors cut out the cancer.
- **Chemotherapy:** Use of special medicines to shrink or kill the cancer. The drugs can be pills you take or medicines given in your veins, or sometimes both.
- **Radiation therapy:** Use of high-energy rays (similar to x-rays) to kill the cancer.
- **Immunotherapy:** Works with your body's immune system to help it fight cancer cells or to control side effects from other cancer treatments.
- **Targeted therapy:** Use of drugs to block the growth and spread of cancer cells. The drugs can be pills you take or medicines given in your veins. You will get tests to see if targeted therapy is right for your cancer type before this treatment is used.

For more information, visit the National Cancer Institute's [Cervical Cancer Treatment](#). This site can also help you [find health care services](#).

## Which treatment is right for me?

Talk to your cancer doctor about the treatment options available for your type and stage of cancer. Your doctor can explain the risks and benefits of each treatment and their side effects. Side effects are how your body reacts to drugs or other treatments.

Sometimes people get an opinion from more than one cancer doctor. This is called a "second opinion." Getting a second opinion may help you choose the treatment that is right for you.

## Clinical trials

[Clinical trials](#) use new treatment options to see if they are safe and effective. If you have cancer, you may want to take part. Visit the sites listed below for more information.

- [NIH Clinical Research Trials and You](#) (National Institutes of Health)
- [Learn About Clinical Trials](#) (National Cancer Institute)
- [Search for Clinical Trials](#) (National Cancer Institute)
- [ClinicalTrials.gov](#) (National Institutes of Health)

## Complementary and alternative medicine

[Complementary and alternative medicine](#) are medicines and health practices that are not standard cancer treatments. Complementary medicine is used **in addition to** standard treatments.



Alternative medicine is used **instead of** standard treatments. Acupuncture and supplements like vitamins and herbs are some examples.

Many kinds of complementary and alternative medicine have not been tested scientifically and may not be safe. Talk to your doctor about the risks and benefits before you start any kind of complementary or alternative medicine.

## Resources

- [Understanding Cervical Changes: A Health Guide](#) (National Cancer Institute)
- [Complementary and Alternative Medicine for Patients](#) (National Cancer Institute)

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