What is cervical cancer screening?

Cervical cancer screening is used to find changes in the cells of the cervix that could lead to cancer. The cervix is the opening to the uterus and is located at the top of the vagina. Screening includes cervical cytology (also called the Pap test or Pap smear) and, for some women, testing for human papillomavirus (HPV).

How does cervical cancer occur?

Cancer occurs when cervical cells become abnormal and, over time, grow out of control. The cancer cells invade deeper into the cervical tissue. In advanced cases, cancer cells can spread to other organs of the body.

What causes cervical cancer?

Most cases of cervical cancer are caused by infection with HPV. HPV is a virus that enters cells and can cause them to change. Some types of HPV have been linked to cervical cancer as well as cancer of the vulva, vagina, penis, anus, mouth, and throat. Types of HPV that may cause cancer are known as “high-risk types.”

HPV is passed from person to person during sexual activity. It is very common, and most people who are sexually active will get an HPV infection in their lifetime. HPV infection often causes no symptoms. Most HPV infections go away on their own. These short-term infections typically cause only mild (“low-grade”) changes in cervical cells. The cells go back to normal as the HPV infection clears. But in some women, HPV does not go away. If a high-risk type of HPV infection lasts for a long time, it can cause more severe (“high-grade”) changes in cervical cells. High-grade changes are more likely to lead to cancer.

Why is cervical cancer screening important?

It usually takes 3–7 years for high-grade changes in cervical cells to become cancer. Cervical cancer screening may detect these changes before they become cancer. Women with low-grade changes can be tested more frequently to see if their cells go back to normal. Women with high-grade changes can get treatment to have the cells removed.
How is cervical cancer screening done?
Cervical cancer screening includes the Pap test and, for some women, an HPV test. Both tests use cells taken from the cervix. The screening process is simple and fast. You lie on an exam table and a speculum is used to open the vagina. The speculum gives a clear view of the cervix and upper vagina.

Cells are removed from the cervix with a brush or other sampling instrument. The cells usually are put into a special liquid and sent to a laboratory for testing:

- For a Pap test, the sample is examined to see if abnormal cells are present.
- For an HPV test, the sample is tested for the presence of the most common high-risk HPV types.

How often should I have cervical cancer screening and which tests should I have?
How often you should have cervical cancer screening and which tests you should have depend on your age and health history:

- Women aged 21–29 years should have a Pap test alone every 3 years. HPV testing is not recommended.
- Women aged 30–65 years should have a Pap test and an HPV test (co-testing) every 5 years (preferred). It also is acceptable to have a Pap test alone every 3 years.

When should I stop having cervical cancer screening?
You should stop having cervical cancer screening after age 65 years if

- you do not have a history of moderate or severe abnormal cervical cells or cervical cancer, and
- you have had either three negative Pap test results in a row or two negative co-test results in a row within the past 10 years, with the most recent test performed within the past 5 years.

If I have had a hysterectomy, do I still need cervical cancer screening?
If you have had a hysterectomy, you still may need screening. The decision is based on whether your cervix was removed, why the hysterectomy was needed, and whether you have a history of moderate or severe cervical cell changes or cervical cancer. Even if your cervix is removed at the time of hysterectomy, cervical cells can still be present at the top of the vagina. If you have a history of cervical cancer or cervical cell changes, you should continue to have screening for 20 years after the time of your surgery.

Are there any women who should not follow routine cervical cancer screening guidelines?
Yes. Women who have a history of cervical cancer, are infected with human immunodeficiency virus (HIV), have a weakened immune system, or who were exposed to diethylstilbestrol (DES) before birth may require more frequent screening and should not follow these routine guidelines.

Having an HPV vaccination does not change screening recommendations. Women who have been vaccinated against HPV still need to follow the screening recommendations for their age group.

What does it mean if I have an abnormal cervical cancer screening test result?
Many women have abnormal cervical cancer screening results. An abnormal result does not mean that you have cancer. Remember that cervical cell changes often go back to normal on their own. And if they do not, it often takes several years for even high-grade changes to become cancer.

If you have an abnormal screening test result, additional testing is needed to find out whether high-grade changes or cancer actually are present. Sometimes, only repeat testing is needed. In other cases, colposcopy and cervical biopsy may be recommended to find out how severe the changes really are. If results of follow-up tests indicate high-grade changes, you may need treatment to remove the abnormal cells. You will need follow-up testing after treatment and will need to get regular cervical cancer screening after the follow-up is complete.

How accurate are cervical cancer screening test results?
As with any lab test, cervical cancer screening results are not always accurate. Sometimes, the results show abnormal cells when the cells are normal. This is called a “false-positive” result. Cervical cancer screening also may not detect abnormal cells when they are present. This is called a “false-negative” result. To help prevent false-negative or false-positive results, you should avoid douching, sexual intercourse, and using vaginal medications or hygiene products for 2 days before your test. You also should avoid cervical cancer screening when you have your menstrual period.

Glossary

Cells: The smallest units of a structure in the body; the building blocks for all parts of the body.

Cervical Cytology: The study of cells taken from the cervix using a microscope; also called the Pap test.

Cervical Biopsy: A minor surgical procedure to remove a small piece of cervical tissue that is then examined under a microscope in a laboratory.

Cervix: The lower, narrow end of the uterus at the top of the vagina.
**Colposcopy:** Viewing of the cervix, vulva, or vagina under magnification with an instrument called a colposcope.

**Co-Testing:** Use of both the Pap test and HPV test to screen for cervical cancer in women aged 30–65 years.

**Human Immunodeficiency Virus (HIV):** A virus that attacks certain cells of the body’s immune system and causes acquired immunodeficiency syndrome (AIDS).

**Human Papillomavirus (HPV):** The name for a group of related viruses, some of which cause genital warts and some of which are linked to cancer of the cervix, vulva, vagina, penis, anus, mouth, and throat.

**Hysterectomy:** Removal of the uterus.

**Immune System:** The body’s natural defense system against foreign substances and invading organisms, such as bacteria that cause disease.

**Pap Test:** A test in which cells are taken from the cervix and vagina and examined under a microscope.

**Speculum:** An instrument used to hold open the walls of the vagina.

**Uterus:** A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

**Vagina:** A tube-like structure surrounded by muscles leading from the uterus to the outside of the body.

**Vulva:** The external female genital area.

---

**If you have further questions, contact your obstetrician–gynecologist.**

**FAQ085:** Designed as an aid to patients, this document sets forth current information and opinions related to women’s health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

Copyright September 2017 by the American College of Obstetricians and Gynecologists.