

# What You Should Know About Pap Smears

**L**et's hear it for the Pap smear! This simple and inexpensive test has prevented millions of women from dying of—or even developing—cervical cancer. Dr. Papanicolaou, for whom the test is named, discovered about 60 years ago that examining a sample of cells from a woman's cervix under a microscope could tell if she had or might develop this potentially deadly disease. So what is a Pap smear? How does it save lives?

## Some Useful Definitions

A Pap smear is a screening test for cancer of the cervix. "Screening test" means it is done on women who have no symptoms. (A "diagnostic" test is done to find out what is causing symptoms.) Your health care provider (doctor, nurse practitioner, nurse midwife, or physician assistant) inserts a small plastic or metal instrument called a speculum into your vagina to stretch the vaginal walls a bit and see your cervix (the bottom part or mouth of the uterus.) She then gently takes a small sample of cells from your cervix by rubbing a small soft brush, wooden stick, or other collecting tool against and inside the opening of the cervix. The procedure is usually not painful, although there is some discomfort from the pressure of the speculum and the feeling of the cervix being touched.

The cells are either spread on a glass microscope slide or stirred into a preservative solution and sent to a laboratory where specialists can examine them under a microscope. In some laboratories, computers are used to assist in reading Pap smears.

A Pap smear shows only if you have or might develop cancer of the cervix. It is not a test for sexually transmitted infections (STIs) or vaginal infections, and a normal Pap smear does not prove you do not have other problems.

A pelvic examination is an inspection of your vulva and vagina, and palpation of your cervix, uterus, and ovaries. Palpation means your health care provider feels these organs by putting one or two fingers inside the vagina and pressing down with the other hand on the lower part of your stomach. If you are having a pelvic exam and are not sure if a Pap smear is being done, you should ask. Other tests that might be done include screening for STIs or taking a sample of vaginal discharge to check for infections. Your health care provider should explain which tests he or she is doing; if not, you should ask.

## How Pap Smears Prevent Cervical Cancer

After years of being told to get Pap smears every year, women are now hearing they may need Pap smears only every 2 or 3 years. What changed?

It appears that cervical cancer is related to a virus, called human papillomavirus (HPV). There are more than 100 different types of HPV, and about 30 of them are spread from one person to another through sexual contact. About 5.5 million new cases of sexually transmitted HPV infections occur every year. At least 20 million people in the United States already have it, but most women with HPV will never develop cervical cancer.

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Fortunately, it takes a long time for cervical cancer to develop. In fact, if you had a normal Pap smear today and, as you left the health care provider's office, the cells on your cervix began to develop abnormally, you would probably still not

*This Patient Handout was prepared by Diane E. Judge, APN/CNP, using materials from Mravcak S. Cervical cancer screening guidelines. The Female Patient. 2004;29(12): 36,39-44; and the US National Library of Medicine/National Institutes of Health (www.nlm.nih.gov).*

## Pap Smears

have cervical cancer when you returned for another Pap smear 3 years later. These changes can usually be found in plenty of time to provide treatment by removing the abnormal cells so they never become cancerous.

### Regular Pap Smears: Who and How Often

Experts do not agree on who should have Pap smears and how often. Talk with your health care provider about what makes sense for you. Here are some recommendations:

**Your First Test.**—There is general agreement that women should start having Pap smears within 3 years of starting to have sex, or by age 21 years.

**How Often.**—Many experts recommend a Pap smear every year for 3 years, based on the fact that no test is perfect. If an abnormality is overlooked on the first year's Pap smear, there will be enough time to find and treat it the following year. If all three Pap smears are normal, some experts recommend a Pap smear every 2 to 3 years. Others say that the frequency of Pap smears should depend on the type of Pap smear done—conventional Pap smear, where cells are placed on a glass slide; or liquid-based, which seems to be more accurate and easier to read—or on your age. Ask for your health care provider's recommendation.

**When to Stop.**—Again, there is some disagreement among experts. Women who are age 70 years old or older, who have had regular Pap smears most of their lives and had no recent abnormal Pap smears, are very unlikely to develop cervical cancer and no longer need the test. Women who have had a hysterectomy (surgery to remove the uterus) do not need Pap smears unless the surgery was done because of cervical cancer, or if the cervix was left in

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place when the uterus was removed. If the uterus and cervix were removed for benign reasons but the patient previously had abnormal Pap smears, she needs to continue to have Pap smears as advised by her health care provider.

### Who Needs Pap Smears More Often.

—Women with medical conditions or drugs that weaken the immune system need more frequent Pap smears. This includes women with human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and those who are taking immunosuppressant medications after organ transplants or for other reasons.

### If You Have an Abnormal Pap Smear

If your Pap smear result is abnormal, don't panic. Ordinarily this does not mean that you have cancer, but that you have some abnormal cells that need more investigation. Further testing will be suggested. One option is a test similar to a Pap smear: Cells are taken from the cervix and examined to determine if you have a type of HPV related to cervical cancer. Another recommendation might be colposcopy. During this exam, a speculum is placed in your vagina and the examiner uses a magnifying instrument, like a pair of binoculars, to look closely at your cervix. He or she may take a sample of tissue (biopsy) from the cervix. The colposcopy is no more uncomfortable than a regular Pap smear, but a biopsy may cause

cramping. Ask if you can take a pain reliever (eg, ibuprofen, aspirin, or acetaminophen) before your appointment to reduce this potential discomfort.

If the biopsy shows abnormal cells, your health care provider will recommend treatment and follow-up. Follow-up may just mean having Pap smears taken every 3 to 6 months, since mildly abnormal cells often go away on their own. For abnormal cells that are not likely to resolve on their own, a procedure to remove the abnormal tissue without removing your cervix or uterus might be recommended. Most treatments can be done without interfering with your ability to get pregnant.

Although it can be distressing to get abnormal Pap and biopsy results, remember that Pap smears usually find abnormalities before they became cancerous.

### Some Additional Information

Even if you only need a Pap smear every 2 to 3 years, you should still see your health care provider yearly for breast exams and to discuss other women's health issues. When you do get a Pap smear, ask for a copy of the result for your files. It is common for women to change health care providers; keeping a copy will remind you and your provider of when your next Pap smear is due and document the results of the last one.

## Resources

### National Library of Medicine MedlinePlus

8600 Rockville Pike  
Bethesda, MD 20894  
1-800-338-7657  
[www.nlm.nih.gov/medlineplus/ency/article/003911.htm](http://www.nlm.nih.gov/medlineplus/ency/article/003911.htm)