

National Cancer Institute

Understanding Cervical Changes



A Health Guide for Women

U.S. DEPARTMENT
OF HEALTH AND
HUMAN SERVICES
National Institutes
of Health



“I didn’t understand my results at first—
and a part of me didn’t want to understand.
But I knew this was important . . . and in
the end, everything turned out fine.”

—MARLENE, AGE 45

Introduction

A Pap Test Showed Cell Changes in Your Cervix

You're probably reading this booklet because your health care provider told you that your recent **Pap test** (sometimes called a **Pap smear**) showed **cell** changes in your **cervix**. Although it is quite common to feel uneasy about your Pap test results, it may comfort you to know that each year more than 3 million women receive similar news.

Many Cell Changes Are Not Cancer

The good news is that, almost always, women with cell changes do not have **cancer** of the cervix (also called **cervical cancer**). But it is important that you protect your health by getting the follow-up tests and care that your health care provider suggests. Having cell changes does not mean that you will get cancer of the cervix. In fact, when cell changes are found and treated early, almost all women can avoid getting cervical cancer.

Getting Your Questions Answered

So what is the next step? What do your results mean? Does this mean you need treatment and, if so, what kind? This booklet helps answer these questions and discusses:

- Types of changes in your cervix
- Common tests and treatments
- How to find the support and resources you need

You will probably have other questions, or you might be concerned about the choices you may need to make. These reactions are normal. But understanding your Pap test results—and what to expect when the results are not normal—can help you make informed decisions and plan your next steps.

A dictionary at the end of this booklet explains terms that may be new to you. Terms included in this dictionary will appear in **bold** in the text the first time they are used.

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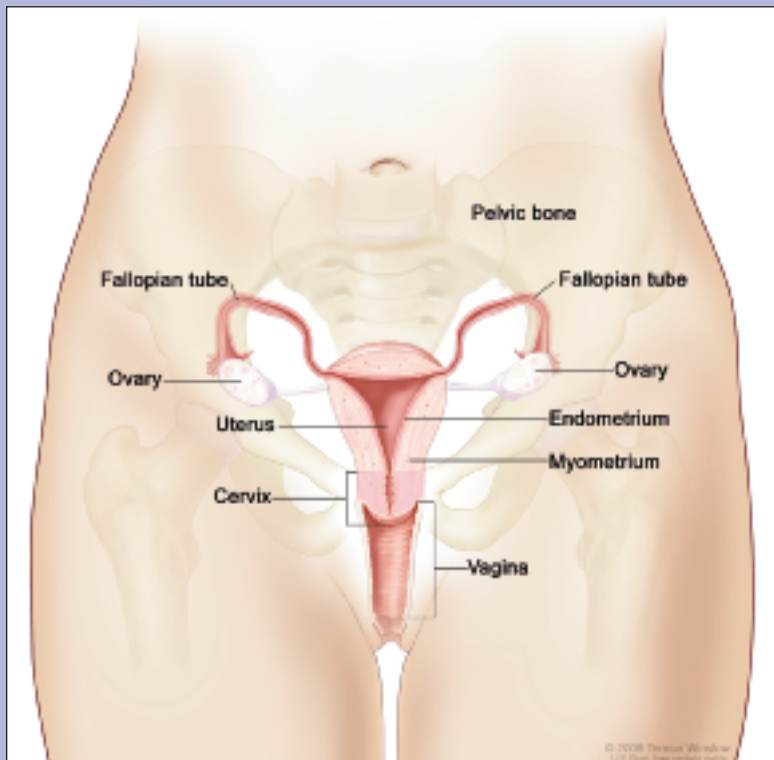
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It is important to get a Pap test at least once every 3 years to check for changes that could be cancer.

What Is the Cervix?

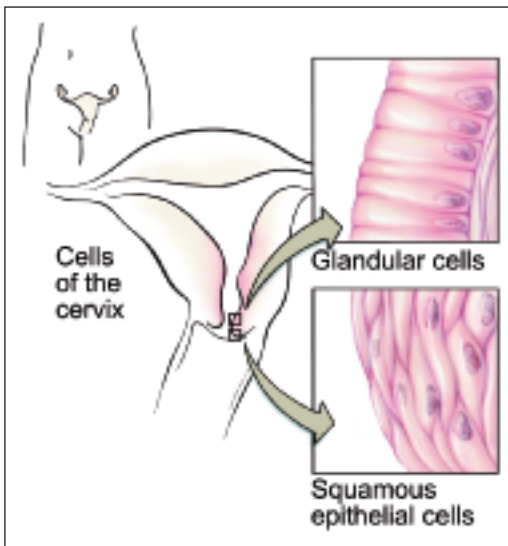
The cervix is the narrow, lower part of the **uterus** where it connects to the upper end of the **vagina**.

The passageway through the cervix is called the **endocervical canal**. This passageway lets blood flow from the uterus into the vagina during a woman's **menstrual period**. During childbirth, it opens much wider to let the baby pass through.

The inner lining of the cervix has two different types of cells:

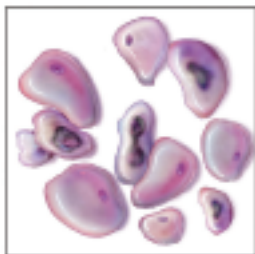
- Tall cells, called **glandular cells** (or columnar cells) toward the top of the endocervical canal. They make **mucus**, which helps guard the entrance to the uterus.
- Thin, flat cells, called **squamous epithelial cells** (or **squamous cells**). Arranged in layers, they protect the **tissues** beneath them.

Pap tests can help reveal changes in these cells.

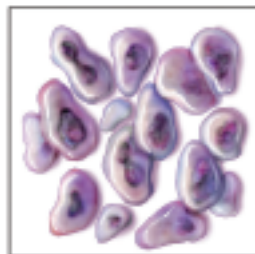




Normal cervical cells



Mix of normal and precancerous cells



Precancerous cervical cells

Common Changes in Cervical Cells

Cervical cells can go through many types of changes that are not cancer. These changes can be caused by:

- **Inflammation** (redness and swelling)
- An **infection** (**bacterial**, **viral**, or **yeast**)
- Growths, such as **benign** (noncancerous) **polyps** or **cysts**
- Changes in **hormones** that occur during pregnancy or **menopause**

Although many cervical cell changes are very common and not related to cancer, they sometimes make cervical cells look like **abnormal** cells. So your health care provider may suggest that you repeat your Pap test or have other follow-up tests to be certain that the cell changes are not cancer. (See the tables beginning on page 14 for more information.)

Cell Changes Caused by HPV Are a Special Concern

Some cervical cell changes are caused by infection with a virus called **HPV (human papillomavirus)**. Most HPV infections eventually go away, or clear, on their own, but sometimes they do not. In infections that do not clear, the HPV-infected cells may

become **precancerous**. If these precancerous cells are not detected and treated early, they can develop into **invasive cancer** of the cervix. An HPV test can detect the virus in cervical cells.

What is HPV?

- It is a very common virus.
- There are more than 100 types.
- Some types cause benign warts on the fingers or feet.
- More than 30 types can be transmitted sexually.
- About 15 sexually transmitted types, called high-risk types, can cause cervical cancer.
- Some other sexually transmitted types, called low-risk types, cause external **warts** on the **genitals** that are not cancerous.

Other Risk Factors for Cervical Cancer

An ongoing, or persistent, infection with a high-risk HPV type is the most important cause of and **risk factor** for cervical cancer. However, studies have shown that *other factors may act together with HPV* to increase a woman's risk of developing cervical cancer. These factors include cigarette smoking, having given birth to many children, and use of birth control pills for five or more years. Also, if you have a weak **immune system**, you may be at higher risk because your body may not be able to clear HPV infections on its own. For example, if you take medicine to block your body's **immune response** or if you are infected with **HIV**, you may be at higher risk of developing cervical cancer.

What Should I Know About HPV Infection?

How Do Women Get HPV?

Almost all HPV that affects the cervix is spread by sex (through intimate **genital** to genital contact, including **vaginal** or **anal** intercourse, finger to genital contact, and finger to anal contact). Genital HPV infections are very common. The majority of sexually active men and women will get a genital HPV infection at some point in their life. Partners in long-term monogamous relationships may be surprised by the diagnosis of an HPV infection. But because most infections cause no symptoms, they can remain undetected for years. Nevertheless, you are at higher risk of getting a cervical HPV infection if:

- You have had more than one sex partner, or
- Your sex partner(s) has had other partners.

For more information about HPV, see the Resources section on pages 28-30.

How Can I Tell if I Have HPV? And What Can Happen to Me if I Have It?

Most women with an HPV infection do not know they have it. Most of the time, it does not cause any symptoms. Certain types of HPV can cause warts on the outside of the genitals, but these types do not cause cervical cancer. The only way to know for sure whether you are infected with an HPV type that causes cervical cancer is by seeing your health care provider.

Almost all cervical HPV infections clear up on their own. Many women with HPV infections will have cell changes, at least briefly, within a few months to a year after becoming infected. But most types of HPV do not cause cancer. However, if the HPV is a high-



“I was really afraid when I found out I have HPV, but talking to the nurse really helped me understand what it is and what we can do about it...”

—JESSICA, AGE 28

risk type and the infection does not go away, you are at higher risk of developing a precancerous change that needs to be treated. It is best to see your health care provider on a regular basis.

How Is an HPV Infection Treated?

Although an HPV infection itself cannot be treated, simple treatments that remove or destroy infected cells may prevent cancer. This is why regular **pelvic exams** and Pap tests are important, along with care for cell changes.

If I Have HPV and It Goes Away, Can I Get It Again?

If you or your partner has HPV, you will share it until your bodies' immune systems get rid of the infections. If you have sex only with each other, you will not pass the HPV virus back and forth. This is because when the HPV goes away, the immune system will “remember” that HPV type and keep you from getting it again. But even though you are protected from one type of HPV, you are not protected from getting other types of HPV.

Finding Abnormal Cells

The Pap Test

The Pap test can find many kinds of cell changes, but the main purpose is to detect cancer or abnormal cells that may lead to cancer.

These cell changes can almost always be treated so you don't get cervical cancer. Most changes in the cervix happen very slowly.

If the lab finds cell abnormalities, the Pap test result is called a **positive test result** or abnormal. If the cervical cells look healthy, the result is called a **negative test result** or normal.

The Pap test is not always 100 percent accurate. If one Pap test misses cell changes, they can often be found on your next test. This is why it is very important that you have regular Pap tests. You should also go back to your health care provider for care if you get an abnormal result.

The Pap Test and DES

If you were born between 1940 and 1971 and your mother was given a **synthetic** form of the hormone **estrogen** called **diethylstilbestrol (DES)** when she was pregnant with you, be sure to tell your doctor. Your doctor may want to take additional cells to check for a rare type of cancer.

The HPV Test

Almost all cervical cancer begins as an infection with HPV. An HPV test can detect the virus in cervical cells.

How Is the HPV Test Done?

In an HPV test a small number of cells is collected from the cervix, much as they are collected for a Pap test. Sometimes, the same cell sample that was taken for the Pap test can be used to check for HPV. A lab then looks for the presence of **DNA** from high-risk HPV types.

When Is an HPV Test Useful?

An HPV test can be useful in **screening** for cervical cancer in two ways:

- **For women of all ages**, an HPV test can be useful as a follow-up to a Pap test with a result of **ASC-US** (see page 14).
- **For women age 30 or older**, an HPV test can be useful if it is done together with a Pap test as routine screening for cancer once every 3 years.

But if you are under age 30, getting an HPV test and a Pap test together on a regular basis is not recommended. In fact, routine HPV tests would lead to unnecessary treatment, because HPV infections are very common in women under 30 and usually go away on their own.



“My doctor helped explain what my Pap test results meant, and what I needed to do.”

—GRETCHEN, AGE 60

How you can help improve the chances that your Pap test results will be correct:

- Don't have a Pap test when you are having your menstrual period. The best time to schedule a Pap test is between 10 and 20 days after the start of your period.
- For about 2 days before a Pap test, do not:
 - **Douche**
 - Use any creams or medicine in your vagina, unless your doctor tells you to do so. These may wash away cells or hide cells with changes.
- Don't have sexual intercourse for 1 or 2 days before your Pap test. This may cause unclear results.

Pap Test Results

Pap test results show if cervical cells are normal or abnormal. If you have an abnormal result, it's important to get the follow-up care and any needed tests or treatment that your health care provider suggests. Or, you may have an "unsatisfactory" result and need to have another Pap test.

Normal Results

- No abnormal cells were found.

Abnormal Results

This can mean one of the following:

- The cells don't look completely normal, but doctors are uncertain about what the cell changes mean (**ASC-US**, **ASC-H**, or **AGC**),
- Mild cell abnormalities were seen (**LSIL**),
- Precancerous cells were present (**HSIL** or **AIS**), or
- Cancer cells were seen.

Unsatisfactory Results

- The lab sample may not have had enough cells, or the cells were clumped together or hidden by blood or mucus. You will need to have another Pap test.

See the table on pages 14-17 for more information about what Pap test results mean and what your health care provider might recommend you do next.

Is It All Right if I Don't Get Tested Again Right Away?

Changes in the cervix happen very slowly. So a few months' delay in getting another test usually does not mean the difference between getting cancer and not getting cancer.

More serious problems can develop when you do not have regular Pap tests or when you do not go back to your health care provider for care after an abnormal result.



“When I learned that my Pap test results were abnormal, I wondered just what the doctor meant by ‘abnormal.’”

—NANCY, AGE 42

Questions To Ask Your Health Care Provider

If you have cervical cell changes, your health care provider may want to do a series of tests or treatments, or may refer you to another provider.

- Tests help your health care provider learn more about the changes in your cervix (see page 18).
- Treatments remove or destroy cells with changes so that healthy cells can grow back (see page 24).

You should always feel at ease asking your health care provider about the reason for a test or treatment and what you should expect during and after it.

Here are some questions you may want to ask:

- What does my test result mean?
- What care is best for me?
- Is this a test designed to help learn more about the changes in my cervix? Or is it a treatment to cure the changes?
- What are the possible results? Will I need more care afterward?
- Are there any risks or **side effects**? How can I manage them?
- Do I need to do anything special to prepare for this test or treatment?
- Do I need to do anything special to care for myself afterward?
- Will this condition affect my ability to get or stay pregnant?
- Will my health insurance pay for the treatment you suggested?

Getting a Second Opinion

If you are concerned about your Pap test result or the recommended treatment, you may want to get a second opinion. Changes in the cervix happen very slowly. Most of the time, it takes many years for precancerous conditions of the cervix to become cancer. Waiting a few months before follow-up care usually does not affect the success of the care you choose. You may want to use this time to:

- Ask your health care provider to have another **pathologist** review your Pap test result.
- Ask another **specialist** or **gynecologist** to review your care plan. (A **gynecologic oncologist**, a doctor who specializes in treating cancers of the female **reproductive system**, is someone you might want to see.)

Some women feel uncomfortable asking for a second opinion. They may feel that they are being a bother or that they will offend their health care provider. However, it is very common for women to seek one, and doctors often expect patients to ask for one. A second opinion may help you feel more certain that you have made the best choices about your health.

If you have health insurance, many insurance companies will pay for a second opinion if you ask for one. Some insurance companies may require a second opinion in some cases.

Most of the time, your health care provider will suggest the name of another specialist if you want a second opinion. Or, you may get names of specialists from your local medical society, a nearby hospital or medical school, or your friends or family members.

NCI cancer information specialists (see page 28) can also help you find qualified doctors and programs through cancer centers and other cancer programs.

Finding the Support You Need

It can be scary when you find out your Pap test is abnormal. You may find it helpful to:

- Ask friends or loved ones for support. They can go to the health care provider's office with you while you are learning about choices in follow-up testing and treatment.
- Ask your health care provider to:
 - Help you understand medical terms that are confusing
 - Tell you how other people have handled the types of feelings that you are having
- Contact the organizations listed on pages 28–30.





“I owed it to myself and my family to find out if anything was wrong. And once I had the facts, it was easy to take the next step.”

—JENNY, AGE 46

Table 1

What Your Pap Test/HPV Test Results Mean and Follow-Up


Possible Result	What It Means to You 
Normal	Only normal cells were seen on the Pap test.
ASC-US	<p>ASC-US (atypical squamous cells of undetermined significance)</p> <ul style="list-style-type: none"> • Some cells from the lining of the outer cervix (also called squamous cells) do not appear normal. • Your health care provider will need to do additional tests to clarify the results.
ASC-H AGC	<p>ASC-H (atypical squamous cells, cannot exclude HSIL)</p> <ul style="list-style-type: none"> • Cervical cells do not appear normal. • A high-grade lesion may be present, but the cell changes are too minor to be sure. <p>AGC (atypical glandular cells)</p> <ul style="list-style-type: none"> • Some glandular cells in the lining of the cervix appear abnormal.

What Your Health Care Provider May Recommend 	Possible Outcomes
<p>Continue to get Pap tests at least once every 3 years.</p>	<p>A False Negative (looks normal, but may not be) The Pap test is a very good screening test, but it is not perfect. A single Pap test may miss up to 20 percent of abnormalities. Changes that are missed once are usually found the next time. This is why it is important to get a Pap test at least once every 3 years.</p>
<ul style="list-style-type: none"> • Follow-up with repeat Pap tests every 6 months • Testing for high-risk HPV • Immediate colposcopy (a test that can be done in the doctor's office to get a magnified view of your cervix) • Biopsy • Estrogen cream 	<p>Abnormal Pap Test Result If a repeat Pap test is abnormal, your health care provider will probably recommend a colposcopy.</p> <p>Positive HPV Test Result If your HPV test is positive, your health care provider will probably recommend a colposcopy.</p> <p>Negative HPV Test Result If your HPV test is negative, your health care provider may recommend a repeat screening in 1 year. Because ASC-US can also be caused by an estrogen deficiency, your health care provider may prescribe an estrogen cream if you are near or past menopause.</p> <p>Abnormal Colposcopy Result If your colposcopy is abnormal, your health care provider may do a biopsy, endocervical curettage, or both.</p>
<ul style="list-style-type: none"> • Colposcopy • Biopsy 	<p>Normal Colposcopy Result If cervical tissue looks healthy, your health care provider may not need to do any further testing or treatment right away, but may recommend an HPV test in 1 year or repeat Pap tests after 6 and 12 months.</p> <p>Abnormal Colposcopy Result If your colposcopy is abnormal, your health care provider may do a biopsy, endocervical curettage, or both.</p>

(Table 1 continues on next page)


Table 1

What Your Pap Test/HPV Test Results Mean and Follow-Up *(continued)*

Possible Result	What It Means to You 
LSIL	LSIL (low-grade squamous intraepithelial lesion) <ul style="list-style-type: none"> • Squamous cells are abnormal but are probably not precancerous.
Precancer <ul style="list-style-type: none"> • HSIL • AIS 	<p>If you have one of the results below, it is very important that you get the necessary tests and treatments.</p> <p>HSIL (high-grade squamous intraepithelial lesion)</p> <ul style="list-style-type: none"> • The lesion is precancerous; without treatment, it may turn into invasive cancer. <p>AIS (adenocarcinoma in situ)</p> <ul style="list-style-type: none"> • A precancerous lesion is found in the glandular tissue of the cervix.
Cancer	<p>Cancer cells are present in the cervix.</p>

This table is based on the American Society for Colposcopy and Cervical Pathology (ASCCP) consensus guidelines.


For more information on cells of the cervix, see page 1 of this booklet.


What Your Health Care Provider May Recommend 	Possible Outcomes
<ul style="list-style-type: none"> • Colposcopy • Biopsy 	<p>Normal Colposcopy Result If cervical tissue looks healthy, your health care provider may not need to do any further testing or treatment right away but may recommend an HPV test in 1 year or repeat Pap tests after 6 and 12 months.</p> <p>Abnormal Colposcopy Result If your colposcopy is abnormal, your health care provider may do a biopsy, endocervical curettage, or both.</p>
<ul style="list-style-type: none"> • Colposcopy • Biopsy 	<p>Normal Colposcopy Result Even if cervical tissue looks healthy, your health care provider may need to do further testing or treatment, including loop electrosurgical excision procedure (LEEP) or repeat colposcopy and Pap tests after 6 and 12 months.</p> <p>Abnormal Colposcopy Result If your colposcopy is abnormal, your health care provider will probably do a biopsy, endocervical curettage, or both.</p>
<ul style="list-style-type: none"> • Colposcopy • Biopsy <p>Your health care provider will probably refer you to a gynecologic oncologist.</p>	<p>Abnormal Colposcopy Result If your colposcopy is abnormal, your health care provider will probably initially do a biopsy, endocervical curettage, or both, and then refer you to a gynecologic oncologist for further evaluation and treatment.</p>

In some cases, follow-up treatment may be different for women who are younger than age 21 or pregnant.

Table 2

Tests or Follow-Up Treatments That Health Care Providers Use for Abnormal Pap Tests


Possible Test or Treatment	What It Is 
Repeat Pap test	<ul style="list-style-type: none"> • Same procedure as the first Pap test • Done if you have minor cell changes or if the result of the first Pap test was unsatisfactory
HPV testing	<ul style="list-style-type: none"> • A sample of cells from your cervix is tested in the lab. This looks for high-risk HPV DNA in the cells.
Hormone therapy	<ul style="list-style-type: none"> • An estrogen cream applied to your vagina/cervix for a few weeks • Prescribed by your doctor if you have ASC-US and are near or past menopause
Colposcopy	<ul style="list-style-type: none"> • The most common follow-up test for women who get an abnormal Pap test result • Your health care provider uses a special tool, called a colposcope, to view your cervix from outside the body. The colposcope has a bright light with a magnifying lens.

What To Expect 	What Your Health Care Provider May Recommend
<p>Same procedure as the first Pap test</p>	<p>You may need to return for repeat Pap tests every 4-6 months until you have two normal results in a row.</p> <p>After two normal results in a row, you can go back to having Pap tests at least once every 3 years.</p>
<p>Procedure is similar to a Pap test.</p>	<p>If the test shows that you have HPV, your health care provider may recommend a colposcopy.</p>
<p>Cell changes caused by low hormone levels will go away, and other changes will remain.</p>	<p>A repeat Pap test is done after 6-8 weeks.</p> <p>If the results of the repeat Pap test are abnormal, your health care provider may recommend a colposcopy.</p>
<p>Can be done in your health care provider's office in about 15 minutes</p> <p>Your health care provider:</p> <ul style="list-style-type: none"> • Puts a speculum into your vagina to see your cervix • Applies diluted white vinegar to the surface of your cervix <p>Areas that are abnormal turn white from the vinegar and can be seen more easily.</p> <p>You may feel nothing at all or a mild tingling.</p>	<p>Depending on the results, your health care provider may recommend further tests or treatments.</p>

(Table 2 continues on next page)

Table 2

Tests or Follow-Up Treatments That Health Care Providers Use for Abnormal Pap Tests *(continued)*

Possible Test or Treatment	What It Is 
<p>Colposcopy with biopsy and/or endocervical curettage</p>	<ul style="list-style-type: none"> • Done if the colposcopy found any abnormal tissue in your cervix (see previous page) • For a biopsy, your health care provider will remove a small piece of tissue from the abnormal area. This specimen is sent to a lab for study. • For an endocervical curettage, your health care provider will remove cells from inside your endocervical canal with a small spoon-shaped tool called a curette; this takes about 10 seconds. This specimen is sent to a lab for study.

What To Expect**What Your Health Care Provider May Recommend**

May cause mild pain and cramping (much like menstrual cramps)

You may have less pain and cramping if you take ibuprofen (brand names include Advil®, Motrin®, and Nuprin®) about an hour before the test.

You may have a brown discharge from your vagina for a few days afterward; you may want to wear a pad.


It takes several days for your cervix to heal. To help prevent infection and bleeding during this time:

- Do not use tampons.
- Do not douche.
- Do not do any heavy lifting.
- Do not have sex.

Depending on the results, your health care provider may recommend further tests and/or treatments.

Table 3

What Does It Mean: Results From Your Biopsy or Endocervical Curettage

Possible Result	
Tissue appears normal	
Tissue shows only mild changes (low-grade)	
Results are unclear	
Severe (high-grade) changes are found	
Invasive cancer cells are found	

To learn about more treatment options, see the National Cancer Institute booklet, "What You Need To Know About Cancer of the Cervix," or visit www.cancer.gov and search for "cervical cancer."

What Your Health Care Provider May Recommend

Your health care provider may not need to do any further testing or treatment right away but may recommend a repeat Pap test or HPV test in 6-12 months.

Your biopsy may have removed all abnormal tissue.

You may or may not need more treatment—even if some abnormal tissue remains.

Your health care provider may not need to do any further testing or treatment right away but may recommend a repeat Pap test or HPV test in 6-12 months.

Your doctor may do more tests, such as **conization**.

You will need treatment to remove more tissue.


Your doctor may perform **LEEP, cryotherapy, laser therapy**, or conization.


Your doctor will do more tests to find out the **stage** (extent) of the cancer. Your treatment will depend on:

- The stage of your cancer
- Your age
- Whether you may want to become pregnant in the future
- Your general health
- Other factors

Table 4

Treatments for Major Cell Changes

Treatment	What It Is 
LEEP	<ul style="list-style-type: none">• A procedure that uses an electrical current passed through a thin wire loop to cut away tissue• Provides a tissue sample for the lab to study
Cryotherapy	<ul style="list-style-type: none">• A procedure that uses a special cold probe to freeze abnormal tissue• The tip of the probe freezes to the cervix and stays attached while a round piece of tissue is destroyed.


What To Expect 	What You Should Do
<p>This procedure is usually done in your doctor's office and takes only a few minutes.</p> <p>During Your doctor will:</p> <ul style="list-style-type: none"> • Put a speculum into your vagina to view the cervix • Numb your cervix using a small needle • Begin the LEEP when the cervix is numb <p>After</p> <ul style="list-style-type: none"> • It takes several weeks for the tissue to heal and grow back. • You may have mild bleeding and a discharge for several weeks. 	<p>Before You may have less pain and cramping if you take ibuprofen (brand names include Advil®, Motrin®, and Nuprin®) about an hour before the procedure.</p> <p>After It takes several weeks for your cervix to heal. To help prevent infection and bleeding during this time:</p> <ul style="list-style-type: none"> • Do not use tampons. • Do not douche. • Do not do any heavy lifting. • Do not have sex.
<p>This procedure is usually done in the doctor's office and only takes a few minutes.</p> <p>During Your doctor will:</p> <ul style="list-style-type: none"> • Put a speculum into your vagina to view the cervix • Insert a special cold probe for about 3 minutes to freeze a controlled amount of tissue • Warm the probe after the tissue has been destroyed and remove it from the cervix <p>After</p> <ul style="list-style-type: none"> • It takes several weeks for your cervix to heal. • You may have a watery, brownish discharge for several weeks. 	<p>Before You may have less pain and cramping if you take ibuprofen (brand names include Advil®, Motrin®, and Nuprin®) about an hour before the procedure.</p> <p>After It takes several weeks for your cervix to heal. To help prevent infection and bleeding during this time:</p> <ul style="list-style-type: none"> • Do not use tampons. • Do not douche. • Do not do any heavy lifting. • Do not have sex.


(Table 4 continues on next page)

Table 4

Treatments for Major Cell Changes

(continued)

Treatment	What It Is 
Conization	<ul style="list-style-type: none"> • Uses a knife or laser to remove a cone-shaped piece of tissue from the cervix and cervical canal • The amount of tissue removed depends on the size of the lesion
Hysterectomy	<ul style="list-style-type: none"> • Surgical removal of the uterus, including the cervix

What To Expect 	What You Should Do
<p>This procedure is usually done in a hospital.</p> <p>Before</p> <p>Your doctor will give you anesthesia before performing the operation.</p> <p>After</p> <ul style="list-style-type: none"> • Stitches are often needed to close the wound. • Bleeding may occur. • It takes several weeks for your cervix to heal. 	<p>Before</p> <p>You may have less pain and cramping if you take acetaminophen (brand names include Tylenol® and Anacin-3®) about an hour before the procedure.</p> <p>After</p> <p>It takes several weeks for your cervix to heal. To help prevent infection and bleeding during this time:</p> <ul style="list-style-type: none"> • Do not use tampons. • Do not douche. • Do not do any heavy lifting. • Do not have sex.
<ul style="list-style-type: none"> • This surgery is done in the hospital and usually requires an overnight stay. • Your doctor will give you an epidural or anesthesia before performing the surgery. • The doctor removes your uterus either through a surgical incision (cut) in your abdomen or through your vagina. • You will not be able to become pregnant after having this surgery. 	<p>This is major surgery.</p> <p>You should discuss follow-up care with your doctor.</p>

Resources to Learn More

National Cancer Institute

NCI has comprehensive research-based information on cancer prevention, screening, diagnosis, treatment, genetics, and supportive care. We also have a clinical trials database and can offer tailored searches.

Phone.....1-800-4-CANCER (1-800-422-6237)

TTY1-800-332-8615

Web sitewww.cancer.gov or www.cancer.gov/espanol

LiveHelp.....www.cancer.gov/livehelp

Emailcancergovstaff@mail.nih.gov

Order publications at www.cancer.gov/publications or by calling 1-800-4-CANCER.

We invite you to call or go online to talk with our trained information specialists, who speak English or Spanish, to:

- Get answers to any cancer-related questions you may have
- Get free NCI publications
- Learn more about specific resources and organizations in your area

American Social Health Association (ASHA)

ASHA's **HPV and Cervical Cancer Prevention Resource Center** provides in-depth information about HPV and cervical cancer prevention and helps you find referrals and join support groups.

Phone.....1-877-478-5868

Web sitewww.ashastd.org

Centers for Disease Control and Prevention (CDC)

CDC conducts, supports, and promotes efforts to prevent cancer and increase early detection of cancer.

CDC-INFO is available 24 hours a day, 7 days a week, 365 days a year for STD information and referrals to STD clinics. Calls are answered by English- or Spanish-speaking experts.

Phone.....1-800-CDC-INFO (1-800-232-4636)

TTY1-888-232-6348

Web sitewww.cdc.gov

CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP) provides these services for underserved women:

- Pap tests
- Pelvic examinations
- Diagnostic tests if results are abnormal
- Referrals to treatment

Centers for Medicare & Medicaid Services (CMS)

CMS provides information for consumers about patient rights, prescription drugs, and health insurance issues, including Medicare and Medicaid.

Medicare is health insurance for people age 65 or older, under age 65 with certain disabilities, and any age with permanent kidney failure. It covers Pap tests and pelvic exams to check for cervical and vaginal cancers, among other services. Medicare has information about providers in your area. English- or Spanish-speaking representatives can help you.

Phone.....1-800-MEDICARE (1-800-633-4227)

TTY1-877-486-2048

Web sitewww.cms.hhs.gov

Medicaid is a program for people who need financial help with medical bills. You can learn more about this program by calling your local state welfare offices, state health department, state social services agencies, or your state's Medicaid office. Spanish-speaking staff is available in some offices.

Web sitewww.cms.hhs.gov

National Women's Health Information Center (NWHIC)

NWHIC is a gateway to women's health information. NWHIC has English- and Spanish-speaking Information and Referral Specialists who will order free health information for you. They can also help you find organizations that can answer your health-related questions. NWHIC is a service of the Office on Women's Health (OWH) in the US Department of Health and Human Services (HHS).

Phone.....1-800-994-9662

TDD1-888-220-5446

Web sitewww.womenshealth.gov

Planned Parenthood Federation of America

Planned Parenthood is a non-governmental organization that provides information and services related to HPV and cervical cancer screening, among other services.

Phone.....1-800-230-PLAN

Web sitewww.plannedparenthood.org

Dictionary

abdomen: The area of the body that contains the pancreas, stomach, intestines, liver, gallbladder, and other organs.

abnormal: Not normal. An abnormal lesion or growth may be cancer, premalignant (likely to become cancer), or benign (not cancer).

AGC (atypical glandular cells): A diagnosis in which the glandular cells do not look normal, but the exact abnormality is unclear. The abnormality affects the cells in the upper part of the endocervical canal or in the lining of the uterus (the endometrium).

AIS (adenocarcinoma in situ): A diagnosis in which a precancerous lesion is present in glandular tissue. The abnormality usually affects the cells in the endocervical canal.

anesthesia: A loss of feeling or awareness caused by drugs or other substances. Anesthesia keeps patients from feeling pain during surgery or other procedures. Local anesthesia is a loss of feeling in one small area of the body. Regional anesthesia is a loss of feeling in a part of the body, such as an arm or leg. General anesthesia is a loss of feeling and a complete loss of awareness that feels like a very deep sleep.

ASC-H (atypical squamous cells—cannot exclude HSIL): A condition in which squamous cells of the cervix do not look normal and a high-grade lesion may be present, but the cell changes are not sufficient to make a firm (or definitive) diagnosis.

ASC-US (atypical squamous cells—of undetermined significance): A condition in which squamous cells of the cervix do not look normal, but the exact abnormality is unclear.

bacteria: A large group of single-cell microorganisms. Some cause infections and disease in animals and humans. The singular of bacteria is bacterium.

benign: Not cancerous. Benign tumors may grow larger but do not spread to other parts of the body. Also called nonmalignant.

Bethesda System: A standard classification system used for reporting Pap test results; describes the types of changes that are observed in the cervical cells.

biopsy: The removal of cells or tissues for examination by a pathologist. The pathologist may study the tissue under a microscope or perform other tests on the cells or tissue. There are many different types of biopsy procedures. The most common types include: (1) incisional biopsy, in which only a sample of tissue is removed; (2) excisional biopsy, in which an entire lump or suspicious area is removed; and (3) needle biopsy, in which a sample of tissue or fluid is removed with a needle. When a wide needle is used, the procedure is called a core biopsy. When a thin needle is used, the procedure is called a fine-needle aspiration biopsy.

cancer: A term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. There are several main types of cancer. Carcinoma is a cancer that begins in the skin or in tissues that line or cover internal organs. Sarcoma is a cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue. Leukemia is a cancer that starts in blood-forming tissue such as the bone marrow, and causes large numbers of abnormal blood cells to be produced and enter the blood. Lymphoma and multiple myeloma are cancers that begin in the cells of the immune system. Central nervous system cancers are cancers that begin in the tissues of the brain and spinal cord. Also called malignancy.

cell: The individual unit that makes up all of the tissues of the body. All living things are made up of one or more cells.

cervical cancer: Cancer that forms in tissues of the cervix (the organ connecting the uterus and vagina). It is usually a slow-growing cancer that may not have symptoms but can be found with regular Pap tests (a procedure in which cells are scraped from the cervix and looked at under a microscope). Cervical cancer is almost always caused by human papillomavirus (HPV) infection.

cervix: The lower, narrow end of the uterus that forms a canal between the uterus and vagina.

cervical intraepithelial neoplasia (CIN): Abnormal growth of cells on the surface of the cervix. Numbers from 1 to 3 may be used to describe how much of the thickness of the lining of the cervix contains abnormal cells. CIN1 corresponds to LSIL, and CIN2/3 corresponds to HSIL.

cervical intraepithelial neoplasia grade 2/3: A condition in which abnormal cells grow on the thin layer of tissue that covers the cervix (the lower, narrow end of the uterus). These abnormal cells are not malignant (cancer) but may become cancer. Cervical intraepithelial neoplasia grade 2/3 has features of CIN 2 and CIN 3. Also called CIN 2/3.

colposcope: A lighted magnifying instrument used to examine the vagina and cervix.

colposcopy: Examination of the vagina and cervix using a lighted magnifying instrument called a colposcope.

conization: Surgery to remove a cone-shaped piece of tissue from the cervix and cervical canal. Conization may be used to diagnose or treat a cervical condition. Also called cone biopsy.

cryotherapy: Any method that uses a very cold temperature to treat disease.

curette: A spoon-shaped instrument with a sharp edge.

cyst: A sac or capsule in the body. It may be filled with fluid or other material. Cysts are almost always benign.

DES (diethylstilbestrol): A synthetic form of the hormone estrogen that was prescribed to pregnant women between about 1940 and 1971 because it was thought to prevent miscarriages. DES may increase the risk of uterine, ovarian, or breast cancer in women who took it. DES has also been linked to an increased risk of clear cell carcinoma of the vagina or cervix in daughters exposed to DES before birth.

DNA (deoxyribonucleic acid): The molecules inside cells that carry genetic information and pass it on from one generation to the next.

douche: A procedure in which water or a medicated solution is used to clean the vagina and cervix.

dysplasia: Cells that look abnormal under a microscope but are not cancer. LSIL, HSIL, and AIS are all forms of cervical dysplasia.

endocervical canal: The opening to the uterus in the center of the cervix.

endocervical curettage: A procedure in which the mucous membrane of the cervical canal is scraped using a spoon-shaped instrument called a curette.

epidural: Having to do with the space between the wall of the spinal canal and the covering of the spinal cord. An epidural injection is given into this space.

estrogen: A type of hormone made by the body that helps develop and maintain female sex characteristics and the growth of long bones. Estrogens can also be made in the laboratory. They may be used as a type of birth control and to treat symptoms of menopause, menstrual disorders, osteoporosis, and other conditions.

false negative: A test result that indicates that a person does not have a specific disease or condition when the person actually does have the disease or condition.

genital: Refers to the genitalia (external and internal sex organs and glands).

glandular cells: Mucus-producing cells located toward the top of the endocervical canal that help guard the entrance to the uterus. Also known as columnar cells, these cells are tall (like columns).

gynecologic oncologist: A doctor who specializes in treating cancers of the female reproductive organs.

gynecologist: A doctor who specializes in treating diseases of the female reproductive organs.

HIV (human immunodeficiency virus): The cause of acquired immunodeficiency syndrome (AIDS).

hormone: One of many chemicals made by glands in the body. Hormones circulate in the bloodstream and control the actions of certain cells or organs. Some hormones can also be made in the laboratory.

hormone therapy: Treatment that adds, blocks, or removes hormones. For certain conditions (such as diabetes or menopause), hormones are given to adjust low hormone levels. To slow or stop the growth of certain cancers (such as prostate and breast cancer), synthetic hormones or other drugs may be given to block the body's natural hormones. Sometimes surgery is needed to remove the gland that makes a certain hormone. Also called endocrine therapy, hormonal therapy, and hormone treatment.

HPV (human papillomavirus): A member of a family of viruses that can cause abnormal tissue growth (for example, genital warts) and other changes to cells. Infection with certain types of HPV increases the risk of developing cervical cancer.

HPV test: DNA test that determines if human papillomavirus infection is present.

HSIL (high-grade squamous intraepithelial lesion): Cells of the uterine cervix that are moderately or severely abnormal and may become cancer. It may also be called moderate dysplasia, severe dysplasia, cervical intraepithelial neoplasia-2 (CIN-2), CIN-3, or carcinoma in situ.

hysterectomy: Surgery to remove the uterus and, sometimes, the cervix. When the uterus and the cervix are removed, it is called a total hysterectomy. When only the uterus is removed, it is called a partial hysterectomy.

immune system: The complex group of organs and cells that defends the body against infections and other diseases.

infection: Invasion and multiplication of germs in the body. Infections can occur in any part of the body and can spread throughout the body. The germs may be bacteria, viruses, yeast, or fungi. They can cause a fever and other problems, depending on where the infection occurs. When the body's natural defense system is strong, it can often fight the germs and prevent infection. Some cancer treatments can weaken the natural defense system.

inflammation: Redness, swelling, pain, and/or a feeling of heat in an area of the body. This is a protective reaction to injury, disease, or irritation of the tissues.

invasive cancer: Cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding healthy tissues. Also called infiltrating cancer.

laser therapy: Treatment that uses intense, narrow beams of light to cut and destroy tissue, such as cancer tissue. Laser therapy may also be used to reduce lymphedema (swelling caused by a buildup of lymph fluid in tissue) after breast cancer surgery.

LEEP (loop electrosurgical excision procedure):

A technique that uses electric current passed through a thin wire loop to remove abnormal tissue. Also called loop excision.

lesion: An area of abnormal tissue. A lesion may be benign (not cancer) or malignant (cancer).

LSIL (low-grade squamous intraepithelial lesion):

A condition in which the cells of the uterine cervix are slightly abnormal. LSIL is not cancer. It may also be called mild dysplasia or cervical intraepithelial neoplasia-1 (CIN1).

menopause: The time of life when a woman's ovaries stop producing hormones and menstrual periods stop. Natural menopause usually occurs around age 50. A woman is said to be in menopause when she hasn't had a period for 12 months in a row. Symptoms of menopause include hot flashes, mood swings, night sweats, vaginal dryness, trouble concentrating, and infertility.

mucus: A thick, slippery fluid made by the membranes that line certain organs of the body, including the nose, mouth, throat, and vagina.

negative test result: A test result that does not show the specific disease, condition, or biomarker for which the test is being done.

Pap test: A procedure in which cells are scraped from the cervix for examination under a microscope. It is used to detect cancer and changes that may lead to cancer. A Pap test can also show conditions, such as infection or inflammation, that are not cancer. Also called Pap smear and Papanicolaou test.

Pap smear: A procedure in which cells are scraped from the cervix for examination under a microscope. It is used to detect cancer and changes that may lead to cancer. A Pap smear can also show conditions, such as infection or inflammation, that are not cancer. Also called Pap test and Papanicolaou test.

pathologist: A doctor who identifies diseases by studying cells and tissues under a microscope.

pelvic examination: A physical examination in which the health care professional will feel for lumps or changes in the shape of the vagina, cervix, uterus, fallopian tubes, ovaries, and rectum. The health care professional will also use a speculum to open the vagina to look at the cervix and take samples for a Pap test. Also called internal examination.

polyp: A growth that protrudes from a mucous membrane.

positive test result: A test result that reveals the presence of a specific disease or condition for which the test is being done.

precancerous: A term used to describe a condition that may (or is likely to) become cancer. Also called premalignant.

reproductive system: The organs involved in producing offspring. In women, this system includes the ovaries, the fallopian tubes, the uterus (womb), the cervix, and the vagina (birth canal). In men, it includes the prostate, the testes, and the penis.

risk factor: Something that may increase the chance of developing a disease. Some examples of risk factors for cancer include age, a family history of certain cancers, use of tobacco products, exposure to radiation or certain chemicals, infection with certain viruses or bacteria, and certain genetic changes.

screening: Checking for disease when there are no symptoms. Since screening may find diseases at an early stage, there may be a better chance of curing the disease. Examples of cancer screening tests are the mammogram (breast), colonoscopy (colon), Pap smear (cervix), and PSA blood level and digital rectal exam (prostate). Screening can also include checking for a person's risk of developing an inherited disease by doing a genetic test.

side effect: A problem that occurs when treatment affects healthy tissues or organs. Some common side effects of cancer treatment are fatigue, pain, nausea, vomiting, decreased blood cell counts, hair loss, and mouth sores.

specialist: In medicine, a doctor or other health care professional who is trained and licensed in a special area of practice. Examples of medical specialists include oncologists (cancer specialists) and hematologists (blood specialists).

speculum: An instrument used to widen an opening of the body to make it easier to look inside.

squamous cell: Flat cell that looks like a fish scale under a microscope. These cells cover inside and outside surfaces of the body. They are found in the tissues that form the surface of the skin, the lining of the hollow organs of the body (such as the cervix, bladder, kidney, and uterus), and the passages of the respiratory and digestive tracts.

stage: The extent of a cancer in the body. Staging is usually based on the size of the tumor, whether lymph nodes contain cancer, and whether the cancer has spread from the original site to other parts of the body.

tissue: A group or layer of cells that work together to perform a specific function.

uterus: The small, hollow, pear-shaped organ in a woman's pelvis. This is the organ in which a fetus develops. Also called the womb.

vagina: The muscular canal extending from the uterus to the exterior of the body. Also called the birth canal.

viral infection: Infection caused by the presence of a virus in the body.

virus: In medicine, a very simple microorganism that infects cells and may cause disease. Because viruses can multiply only inside infected cells, they are not considered to be alive.

wart: A raised growth on the surface of the skin or other organ.

yeast infection: An overgrowth of yeast that can affect the skin (yeast rash), mouth (thrush), digestive tract, esophagus, vagina (vaginitis), and other parts of the body. Yeast infections occur most frequently in moist areas of the body.

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(1-800-422-6237)

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