

Cervical Cancer Screening *ThinPrep® Pap Test*

Almost 4,800 women die of cervical cancer each year in the United States, but most of these deaths could be prevented if every woman regularly had a simple test to detect cervical cancer or pre-cancerous changes. Currently the Palo Alto Medical Foundation (PAMF) employs the ThinPrep® Pap Test, which replaces the older Pap smear.

What is the ThinPrep Pap Test?

A ThinPrep Pap Test involves collecting a small sample of cells from the cervix, the part of the uterus that extends into the vagina. The cells obtained are filtered, placed on a slide and analyzed. Analysis usually includes initial computer screening followed by slide review by trained personnel. The ThinPrep Pap Test screens for cervical cancer or pre-cancerous changes. We now believe that cervical cancer is caused by infection of the human papilloma virus (HPV), which is a sexually transmitted disease. Certain subtypes of HPV are more likely to cause cervical cancer, and these subtypes can be determined from the ThinPrep sample.

Who should have a ThinPrep Pap Test?

We recommend that all women have their first ThinPrep Pap Test within three years of their first sexual intercourse, or by age 21 years (whether sexually active or not). Women should see their medical provider annually, for advice on safer sex and chlamydia screening, until 26 years of age. After this age, it is important for women to continue regular ThinPrep Pap Test screening – even after menopause. A pelvic exam is generally performed at the time of the ThinPrep Pap Test, but may be performed at more frequent intervals at the discretion of the patient and the health care provider.

When is the best time to have a ThinPrep Pap Test?

Ideally, you should wait two weeks following the end of your menstrual flow. Avoid intercourse, douches, vaginal medications and lubricants for at least 24 hours prior to your visit. Postmenopausal women may have their examination any time during the month. Let your provider know if you have any unusual vaginal bleeding, irregular periods or pelvic pain.

Are the ThinPrep Pap Test results accurate?

The ThinPrep Pap Test has been approved by the U.S. Food and Drug Administration as “significantly more effective” than the conventional pap smear for detection of cervical abnormalities. However, a very small number of abnormal ThinPrep Paps Tests may be read as normal (false negative). And as in all screening tests, it is possible that an abnormal result will be recorded when no disease is present (false positive). For these reasons, all women should have regular cervical cancer screening at least once every three years. Your practitioner may follow an abnormal report with a repeat ThinPrep Pap Test, a special visualization of the cervix (colposcopy), or a biopsy (taking a small sample of cells to evaluate under the microscope).

What are the possible test results?

First, the ThinPrep Pap Test is checked to see that all cell types from the cervix are found in adequate amounts. If they are not, the sample is deemed *suboptimal*. In this case, your health care provider may recommend collecting another sample or may wait until the next regularly scheduled interval.

Possible results:

- **No Intraepithelial Lesions or Malignancy:** The most common result, meaning that no significant abnormality was detected.

- **Benign Reactive or Reparative Cell Changes:** Mild changes usually caused by inflammation or repair of cervical injury. Because these changes are sometimes associated with more serious abnormalities, a ThinPrep Pap Test may be repeated in six months.
- **Atypical Squamous Cells of Uncertain Significance (ASCUS):** Abnormal cells that are not clearly pre-cancerous. Atypical cells may be caused by inflammation or irritation. ThinPrep Pap Test samples that show ASCUS are usually analyzed further for presence of HPV subtypes.

“High-risk” HPV subtypes are more likely to progress to cancer over time. Therefore, women with ASCUS and high-risk HPV subtypes require closer evaluation, including colposcopy (checking the cervix with a magnifying lens) to examine the cervix more closely and take biopsies if necessary.

“Low-risk” HPV subtypes generally do not progress to cervical cancer. Therefore, women with a first-time finding of ASCUS and low-risk HPV subtypes or with no HPV subtype detected at all only need to return for a repeat test in 12 months. In such women, the ASCUS abnormality either returns to normal on its own without any treatment, or remains stable without further worrisome progression.

In a small number of instances, the observed ASCUS is concerning enough to warrant further examination, even without HPV testing. If so, then colposcopy is recommended.

- **Atypical Glandular Cells of Uncertain Significance (AGCUS):** Abnormal cells that are not clearly pre-cancerous. The follow-up plan is individualized, depending on the abnormalities found.
- **Low-Grade Squamous Intraepithelial Lesion (LGSIL):** Previous names for this include koilocytosis, mild dysplasia or Cervical Intraepithelial Neoplasia (CIN) I. Potentially pre-cancerous changes are present. Most low-grade lesions resolve spontaneously or persist without progression. Only 10 to 20 percent of women with a ThinPrep Pap Test showing LGSIL progress to more advanced disease. Typically, a ThinPrep Pap Test is repeated every three months until the lesion disappears. Colposcopy may be necessary.
- **High-Grade Squamous Intraepithelial Lesion (HGSIL):** Previous names include moderate and severe dysplasia, carcinoma in situ and Cervical Intraepithelial Neoplasia (CIN) II and III. This finding often reflects pre-cancerous changes. Left untreated, some women with HGSIL will develop cervical cancer. Colposcopy is performed to evaluate HGSIL.
- **Carcinoma:** Cancer that requires treatment. Your health care provider will discuss this condition with you.
- **Unsatisfactory:** Rarely, the ThinPrep Pap Test is deemed *unsatisfactory* because very few cells are present. Usually, unsatisfactory tests are repeated promptly.

Conclusion. It is very important that you obtain regular cervical cancer screening with follow-up exams as recommended by your health care provider. PAMF currently advises a ThinPrep Pap Test every 1 to 3 years for average-risk women until 65 years of age. After age 65 there is no evidence that continued screening further reduces risk for cervical cancer. You should consult your physician if you have any concern about exposure – at any age – to sexually transmitted disease or to the human papilloma virus.

Where can I find out more about screening for cervical cancer?

- Have a conversation with your primary care physician
- The Community Health Resource Center at PAMF
- The Agency for Healthcare Research and Quality Web site at <http://www.ahrq.gov/>