

## Abnormal Pap Smear

The Pap test, or "Pap Smear", is an important part of women's health care. This test evaluates the cells obtained from the cervix and screens them for any abnormal changes. Some abnormal cells may be pre-cancerous or, rarely, cancer.

The results of a Pap test are reported in the following fashion:

<b>Normal:</b>	There are no signs of cancer or pre-cancer cells
<b>Atypical (ASCUS):</b>	Some abnormal cells are detected and may be caused by infection or may be pre-cancerous. Frequently, the cause is the HPV virus. A follow-up test is automatically performed for HPV High Risk virus. If this test is positive, then another office test called a colposcopy is recommended (see below). If the test is negative, the Pap is repeated in 6 months.
<b>SIL:</b>	Changes are detected in the cells that may show signs of pre-cancer changes. These can be low grade (LISLE) or high grade (HAIL).
<b>LSIL:</b>	Low grade mild changes cell changes are present
<b>HSIL:</b>	Moderate or Severe grade cell changes are present
<b>ARC:</b>	Atypical Glandular Cells. Abnormal cell changes usually from the glandular cells with in canal of the cervix.

Most all pre-cancer or cancer changes detected in the cervix are usually caused by an infection by HPV (human Papilloma virus). In some cases the virus can cause abnormalities in the infected cells called *dysplasia*. If the HPV test is positive for High Risk HPV (types associated with severe pre-cancer or cancer), further testing is necessary by examining the tissues of the cervix and vagina with a magnifying microscope called a *colposcope*. A biopsy of any abnormal cells is performed to identify the specific cervical abnormality.

The biopsy results may be reported as:

- **Inflammatory**
- **HPV**
- **CIN (Cervical Intraepithelial Neoplasia) or Dysplasia.** The amount of abnormal cells in the tissue biopsy determines the level or severity of the dysplasia.
  - Level I – mild (**CIN I**),
  - Level 2 - moderate (**CIN II**)
  - Level 3 – severe (**CIN III**)

Treatment varies with the biopsy results as well as the extent of the changes found at the time of colposcopy. Initial treatment is one of the following:

- **No treatment** necessary except for a follow-up Pap test
- **Follow-up Pap smear.** Minimal changes may clear spontaneously. However, close follow up is needed to ensure the changes do not progress to more severe changes.
- **Cryosurgery** or freezing the abnormal tissue on the cervix (a painless office procedure).

- **LEEP Procedure** (Loop Electrosurgical Excision Procedure): This is most often used with moderate to high-grade dysplasia (CIN 2 - CIN 3). It is also used for persistent low-grade changes of the cervix that do not resolve on their own. A thin wire loop with electrocautery is used to remove the abnormal tissue. It is performed in the office under a local anesthesia
- **Laser:** This treatment is another method that may be recommended under certain circumstances. It is performed under a light general anesthesia as an out patient procedure.
- **Cone Biopsy:** In this procedure, a cone shaped wedge section of the cervix is removed. General or spinal anesthesia is used for the cone biopsy. The procedure is usually performed in an outpatient surgery center.

An abnormal Pap test is not uncommon. Most problems associated with an abnormal Pap can be treated simply, when detected early. Also, vaccinating all girls between the ages of 9-26 with the HPV vaccine can help prevent not only cervical cancer, but also the pre-cancer changes described above. For further information regarding HPV and the Gardasil HPV vaccination, review the article on HPV on our website.