A doctor may simply describe Pap test results to a patient as “normal” or “abnormal.” It is important to remember that abnormalities rarely become cancerous, and even severe lesions do not always lead to cancer. Likewise, HPV test results can either be “positive,” meaning that a patient is infected with at least one high-risk HPV type, or “negative,” indicating that high-risk HPV types were not found. A woman may want to ask her doctor for specific information about her Pap and HPV test results and what these results mean.

Most laboratories in the United States use a standard set of terms, called the Bethesda System, to report Pap test results. Under the Bethesda System, samples that have no cell abnormalities are reported as “negative for intraepithelial lesion or malignancy.” A negative Pap test report may also note certain benign (non-neoplastic) findings, such as common infections or inflammation. Pap test results also indicate whether the specimen was satisfactory or unsatisfactory for examination.

The Bethesda System considers abnormalities of squamous cells and glandular cells separately. Squamous cell abnormalities are divided into the following categories, ranging from the mildest to the most severe.

**Atypical squamous cells (ASC)** are the most common abnormal finding in Pap tests. The Bethesda System divides this category into two groups, which are described below.

- **ASC-US**: atypical squamous cells of undetermined significance. The squamous cells do not appear completely normal, but doctors are uncertain about what the cell changes mean. Sometimes the changes are related to an HPV infection, but they can also be caused by other factors. For women who have ASC-US, a sample of cells may be tested for the presence of high-risk HPV types. If high-risk HPV type is present, follow-up testing will usually be performed. On the other hand, a negative HPV test can provide reassurance that cancer or a precancerous condition is not present.
- **ASC-H**: atypical squamous cells, cannot exclude a high-grade squamous intraepithelial lesion. The cells do not appear normal, but doctors are uncertain about what the cell changes mean. ASC-H lesions may be at higher risk of being precancerous compared with ASC-US lesions.

**Low-grade squamous intraepithelial lesions (LSILs)** are considered mild abnormalities caused by HPV infection. Low-grade means that there are early changes in the size and shape of cells. Intraepithelial refers to the layer of cells that forms the surface of the cervix. LSILs are sometimes classified as mild dysplasia. LSILs may also be classified as cervical intraepithelial neoplasia (CIN-1).

**High-grade squamous intraepithelial lesions (HSILs)** are more severe abnormalities that have a higher likelihood of progressing to cancer if left untreated. High-grade means that there are more evident changes in the size and shape of the abnormal (precancerous) cells and that the cells look very different from normal cells. HSILs include lesions with moderate or severe dysplasia and carcinoma in situ (CIS). HSIL lesions are sometimes
classified as CIN-2, CIN-3, or CIN-2/3. CIS is commonly included in the CIN-3 category.

Squamous cell carcinoma is cervical cancer. The abnormal squamous cells have invaded deeper into the cervix or into other tissues or organs. In a well-screened population, such as that in the United States, a finding of cancer during cervical screening is extremely rare.

Glandular cell abnormalities are divided into the following categories:

Atypical glandular cells (AGC), meaning the glandular cells do not appear normal, but doctors are uncertain about what the cell changes mean.

Endocervical adenocarcinoma in situ (AIS), meaning that precancerous cells are found only in glandular tissue of the cervix.

Adenocarcinoma includes not only cancer of the endocervical canal itself but also, in some cases, endometrial, extrauterine, and other cancers.

(adapted from: http://www.cancer.gov/cancertopics/factsheet/detection/Pap-HPV-testing)