

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

## YOUR PAP SMEAR: WHAT YOU NEED TO KNOW

**WHAT IS A PAP SMEAR?**

A Pap smear is a screening test that looks for abnormal cells in the cervix concerning for cancer and pre-cancer. The cervix is the lower part of the uterus, which opens during childbirth to allow a baby to pass into the vaginal (birth) canal. Because early cervical cancer typically has no symptoms, screening for cervical cancer with a routine Pap smear is key to prevention and early diagnosis.

**WHAT CAUSES CERVICAL CANCER?**

Cervical cancer is primarily caused by certain strains of the Human Papillomavirus (HPV). There are over 100 different types of genital HPV, but most do not cause cancer. “Low-risk” HPV types can cause genital warts but rarely lead to cancer. “High-risk” HPV types are the primary cause of cervical cancer. Fortunately, most people infected with “high-risk” HPV strains do not develop cervical cancer because the body usually clears the infection on its own within 2 years. In general, “high-risk” HPV infections must be present for many years before progressing to cervical cancer.

At least 80% of females are exposed to HPV during their lifetimes. Sexual activity increases the risk of exposure to HPV and other sexually transmitted infections (STIs). Genital HPV is spread by direct skin-to-skin contact with an infected person’s genital area. Many people don’t know that they have HPV because there are no symptoms. Please refer to our handout “HPV & Cervical Cancer” for more information.

**WHAT ARE RISK FACTORS FOR CERVICAL CANCER?**

High-risk sexual activity increases exposure to HPV. Examples include having sex prior to age 18, having multiple or high-risk sexual partners, and being diagnosed with STIs.

Other risk factors for cervical cancer are associated with having a compromised immune response to HPV infection. These include tobacco use and diseases that cause immunodeficiency (eg. HIV).

**WHEN DO I NEED TO START GETTING A PAP SMEAR?**

In the United States, the general recommendation is to get your first Pap smear at age 21. Some other countries recommend getting your first Pap smear by age 25. Any person with a cervix should get screened, regardless of gender identity or sexual orientation.

**HOW DO I PREPARE FOR A PAP SMEAR?**

A Pap smear can be performed at any time during your menstrual cycle; however, results may be more accurate if you are not on your period at the time of the Pap smear.

- ❖ If you plan to schedule your Pap smear at Student Health, you must call to set up an appointment, stating clearly that it is for a Pap smear.
- ❖ During the 2 days prior to your Pap smear, avoid putting anything inside your vagina. This means that you should not have sex, use tampons, douche, or use any vaginal medications/creams/etc.

**WHAT HAPPENS DURING A PAP SMEAR?**

Your medical provider will perform a pelvic exam using a device called a speculum to open the vagina. A small brush will be used to collect cells from the outside of the cervix and from the canal that leads into the uterus. This procedure does not hurt, but you may feel some pressure during the exam. It is normal to experience mild cramping and a small amount of spotting afterwards.

**WHAT DOES MY PAP SMEAR RESULT MEAN?**

The results from your Pap smear will be available in about 2 weeks. Results can be “normal”, “unsatisfactory for evaluation”, or “abnormal”. Sometimes a Pap smear will incidentally identify other vaginal infections (like yeast or trichomonas), even though it was not designed for this purpose.

- ❖ **Normal.** This means that no changes concerning for precancer or cancer were found on the cervix.
  - If you are 21-29 years old and have a normal Pap smear, your next Pap smear is due in 3 years.
  - If you are 30 years old or older, “co-testing” with a Pap smear plus an HPV test is typically completed. The HPV test looks for high-risk HPV types. If you have a normal Pap smear and a:
    - Negative HPV test, you will need co-testing (Pap smear and HPV test) in 5 years.
    - Positive HPV test, you will need co-testing (Pap smear and HPV test) in 1 year.
- ❖ **Unsatisfactory for evaluation.** This is NOT an abnormal result. It simply means that insufficient cells were obtained during testing.
  - If the cause is an infection, the Pap smear should be repeated after the infection has been treated.
  - If the cause is insufficient sampling of the cells, the Pap smear is typically repeated in 2-4 months.

## **WHAT IS AN ABNORMAL PAP SMEAR?**

**If you receive a call from Student Health stating that your Pap smear is abnormal, don't panic!**

Most abnormal Pap smears show mild cellular changes that are not cancer. These changes are usually due to HPV infections, which frequently clear on their own within 8 to 24 months without treatment. However, it is still important to follow up on all abnormal Pap smears to ensure proper monitoring and treatment if needed.

**In patients 25 years of age or older, management of an abnormal Pap will depend on their "risk estimate"** for developing cervical precancer. This estimate is calculated based on current and past Pap results. A lower risk estimate typically means that repeat testing in 1-5 years is appropriate. A higher risk estimate usually means that a colposcopy or other treatment is necessary.

**The most common causes of abnormal Pap smears are described below:**

- ❖ **Atypical squamous cells of undetermined significance (ASCUS).** This means that the cervix has cells with slight abnormalities that are not clearly precancerous. These changes may or may not be related to HPV. If HPV is the cause, most young adults will clear the HPV infection within 1 year without any intervention.
  - If you are 21-24 years old & have ASCUS, you will need a repeat Pap smear annually for 2 years. An alternate option is to test for HPV; if HPV is negative, you can repeat your Pap smear in 3 years.
  - If you are 25 years old or older & have ASCUS, management will depend on your "risk estimate" for developing cervical precancer, as described above. In general, most people with ASCUS and:
    - A negative HPV test will be advised to repeat testing in 3 years.
    - A positive HPV test will be referred for colposcopy.
- ❖ **Low-grade squamous intraepithelial lesions (LSIL).** This means that the cells of the cervix show mildly abnormal changes. These low-grade findings are usually due to HPV infections that are transient and resolve on their own. The risk of cervical cancer with LSIL is less than 1%.
  - If you are 21-24 years old & have LSIL, you will need a repeat Pap smear annually for 2 years.
  - If you are 25 years old or older & have LSIL, management will depend on your calculated "risk estimate" for cervical precancer, as described above. In general, most people with LSIL and:
    - A negative HPV test will be advised to repeat testing in 1 year.
    - A positive HPV test will need colposcopy.
- ❖ **High-grade squamous intraepithelial lesions (HSIL).** This means that the cells of the cervix show moderate to severe changes that are likely due to chronic HPV infection. These high-grade lesions require treatment because they are unlikely to resolve on their own. With HSIL, the risk of precancer is as high as 53%, and the risk of cervical cancer is up to 7%.
  - All patients with HSIL will be referred to a gynecologist for colposcopy and further evaluation.
  - Although progression to cancer requires persistent HPV infection for many years, it is important to complete the colposcopy and follow up with your gynecologist as recommended.

## **WHAT IS A COLPOSCOPY? (COL-POS-COPY)**

A colposcopy is a procedure that uses a type of microscope (called a colposcope) to examine your cervix more clearly during a pelvic exam. It is similar to getting a Pap smear and may cause some mild discomfort or cramping. Your cervix will be swabbed with a vinegar solution to outline any abnormal tissue for biopsy. Biopsy results (usually available in 2-3 weeks) will determine if further treatment is needed. If a precancerous lesion is identified and removed, cervical cancer can usually be prevented.

## **HOW CAN I PROTECT MYSELF?**

- ❖ Get vaccinated against HPV. Gardasil 9 is a safe and effective vaccine that protects against 9 HPV strains that cause the majority of cervical cancers and genital warts. In young adults, it is given in 3 doses over 6 months. Routine vaccination is recommended for people ages 9-26; however, vaccination may be considered in people ages 27-45 depending on their risk factors. Even if you've already been diagnosed with HPV, the vaccine can still protect against other HPV types to which you have not yet been exposed. The vaccine does not treat or cure existing HPV infections.
- ❖ Get your Pap smear on a regular basis, and follow up as directed on any abnormal results.
- ❖ Use condoms every time you have sex to decrease exposure to genital HPV and other STIs. Studies show that condom use is associated with a lower rate of cervical cancer.
- ❖ Limit your number of sexual partners.
- ❖ Don't smoke. Cigarette smoking can increase the risk of cervical cancer up to four-fold. Smoking also makes it harder to treat abnormal cells found on the cervix.

**RECOMMENDED WEBSITES:** [www.acog.org](http://www.acog.org), [www.cancer.gov](http://www.cancer.gov), [www.cdc.gov](http://www.cdc.gov)