

Abnormal Pap and HPV Testing

An abnormal Pap smear result occurs when the outer cells of your cervix show signs of changes that could lead to cervical cancer. Several types of abnormal Pap results can occur based on the appearance of your cervical cells under a microscope. Your result may be classified as negative (normal), ASCUS, LSIL, ASC-H, HSIL, AGC, or AIS. Depending on your age and other factors such as your Pap result and medical history, the same sample may be tested for "high-risk" human papillomaviruses (hrHPV).

HPV Testing

Cervical infection with hrHPV is responsible for almost all abnormal Pap smear results. If hrHPV is detected in your sample, you will be informed that you are "HPV positive." hrHPV testing checks for types 16, 18, 45, and others that are associated with an increased risk of cervical cancer. hrHPV is transmitted through sexual contact, and up to 80% of sexually active individuals are exposed to the virus. hrHPV is asymptomatic in most people and does not cause genital warts. If someone is infected with hrHPV, their risk of developing cervical cancer is increased if they smoke, are pregnant, or have medical conditions that weaken their immune system.

The Gardasil vaccine series helps prevent infection with certain types of HPV and decreases your lifetime risk of cervical cancer. If you have not yet received Gardasil, your clinician will recommend the series, even if you have already tested positive for hrHPV and/or have an abnormal Pap result. If you have received part of the series before, your clinician will recommend getting the remaining dose(s).

Abnormal Pap Result

The most common abnormal Pap results are ASCUS (Atypical Squamous Cells of Undetermined Significance) and LSIL (Low-Grade Squamous Intraepithelial Lesion). Based on your age, history, and other factors such as co-existing HPV infection, your clinician may advise you to repeat your Pap in 1-3 years or may recommend a colposcopy to more closely examine your cervix. ASCUS and LSIL are less associated with cervical cancer and precancer than ASC-H, HSIL, and AGC.

ASC-H (Atypical Squamous Cells – Cannot Exclude High-Grade Lesion) and HSIL (High-Grade Squamous Intraepithelial Lesions) suggest a higher chance of the presence of cervical precancer or, very rarely, cervical cancer. An AGC (Atypical Glandular Cells) result is sometimes caused by abnormal uterine cells, and a uterine biopsy may be recommended to rule out precancerous or cancerous changes in the endometrium (the lining of your uterus). ASC-H, HSIL, and AGC all require a colposcopy procedure to identify any precancerous or cancerous areas. During the colposcopy, your clinician will biopsy anything that looks suspicious and will carefully review your results with you when they are received.

Many women will have an abnormal Pap or HPV result at some point in their life. With any abnormal Pap or positive hrHPV result, it is critical that you follow the advice of your clinician. Our clinicians base all their recommendations on the American Society of Cervical Cancer Prevention (ASCCP) guidelines for Pap interpretation and management. These guidelines are used to create an individualized treatment plan that fits your specific needs.