



## Introduction to Ultrasound

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Ultrasound is a diagnostic procedure that uses high frequency sound waves to image organs and vessels in the body. The sound waves are transmitted through the body by a transducer that is placed directly over the skin. Since sound waves do not penetrate through air, ultrasound gel is used as a coupling material between the transducer and the patient's skin.

Sound waves are transmitted through the body by the transducer, the sound waves bounces off the structure being imaged and is reflected back as echoes. These echoes return to the transducer and are then transmitted to a monitor where the images can be manipulated by the sonographer or physician for diagnostic purposes.

Ultrasound examinations can be used in various areas of the body for a variety of purposes. Here at Chester County OB/GYN it is used for gynecological and obstetrical exams. During a gynecological ultrasound the size and structure of the uterus and ovaries are evaluated to determine normal versus abnormal anatomy. During an obstetrical ultrasound, evaluation of the size, growth, position, movement and well being of the baby is assessed. And in most cases, the baby's gender can be determined.