What is Diagnostic Sonography?

Sonography (ultrasound) is a non-invasive diagnostic medical imaging procedure used to visualize organs or systems in the body.

In sonography, a transmitting device (the transducer) sends out high-frequency ultrasound waves. Harmless sound waves, which contain no radiation, bounce off the surfaces of the object they hit. The reflected sound forms an echo which is visualized on the screen.

Why Do I Need a Sonogram?

You may need a sonogram for a variety of different reasons. Your healthcare professional may order the examination to obtain a better understanding of the best way to treat you. While sonography is commonly used for monitoring fetal growth, it is also used to monitor the health of your heart, abdomen, vascular and musculoskeletal systems.

The sonogram will typically be performed by a physician, sonographer, or a medical imaging specialist. Be sure you are receiving the highest level of care by asking if the person performing your examination has been certified by the American Registry for Diagnostic Medical Sonography or the Alliance for Physician Certification & Advancement.
What Happens During a Sonogram?

An odorless, colorless gel is applied to the area of the body to be examined. The sonographer or imaging professional will then place a small handheld device known as a transducer on your skin. The transducer emits high-frequency pulses of ultrasonic waves that travel into your body.

Your body then reflects the sound waves, and the images appear on the screen. The gel helps eliminate air pockets between your body and the transducer, thus providing clearer images for the physician to study.

As the transducer is moved, images of the various organs appear on a monitor. The sonographer then optimizes the images and electronically stores the most diagnostically useful images. Selected images are then shared with an interpreting physician for a final diagnosis.

Why Does Certification Matter?

Certification makes a critical difference in the quality of the sonogram. Knowing how to perform and interpret a sonogram accurately takes years of training and experience.

Certification from APCA and credentials from ARDMS assure that the medical professional interpreting and performing the examination has obtained the knowledge and skills needed for maintaining the highest standards in the practice of ultrasound.