

## Ultrasound

Diagnostic ultrasound, also known as sonography or diagnostic medical sonography, is an imaging technique utilizing sound waves to generate images of internal body structures. These images are invaluable for diagnosing and managing various diseases and conditions.

### Purpose:

- Monitor fetal health and development during pregnancy
- Detect gallbladder disease
- Assess blood flow
- Guide biopsy procedures or tumor treatments
- Investigate breast lumps
- Evaluate thyroid gland
- Identify genital and prostate issues
- Examine joint inflammation
- Assess metabolic bone disease

**Risks:** Diagnostic ultrasound employs low-power sound waves and is considered safe with no known risks. However, it has limitations as sound waves don't penetrate air or bone effectively, making imaging of areas like the lungs or head challenging. Additionally, deep-seated objects may be difficult to visualize, necessitating other imaging modalities such as CT or MRI scans.

### Preparation:

- Most ultrasound exams require no specific preparation.
- Some scans, like gallbladder ultrasounds, may require fasting.
- Pelvic ultrasounds may necessitate a full bladder.

### Procedure:

- Wear loose clothing and remove jewelry.
- Gel is applied to the skin over the area of interest to enhance image clarity.
- A trained technician moves a handheld device (transducer) over the area, emitting sound waves and capturing their reflections.
- Internal ultrasounds may involve probes inserted into natural body openings.
- Ultrasound is typically painless but may cause mild discomfort, especially with a full bladder or internal probes.
- The procedure lasts 30 minutes to an hour.

**Results:** A radiologist interprets the images and sends a report to your doctor, who will then discuss the findings with you. You can resume normal activities immediately after the ultrasound.

**(Doctor Edges will ensure your ultrasound procedure is conducted smoothly and accurately, addressing any concerns you may have throughout the process.)**

