

 **BEYOND CLEAN UK & IRE**
WHAT IS ULTRASOUND?



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ULTRASOUND PROBE EXPERT



Beyond Clean UK&I Ultrasound Probe Expert™:

What is Ultrasound?

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Ultrasound is used in a growing list of procedures in almost every healthcare department. Ultrasound, also known as sonography, is a non-invasive imaging technique for diagnosing a variety of conditions. Ultrasound has many advantages over other imaging modalities that have led to its widespread use throughout healthcare.

Advantages of Ultrasound:

- Does not use ionising radiation
- Can be used at the patient's bedside
- Provides actionable information in real-time by providing image data such as ECG & measurements
- Is mobile and not limited to use in imaging departments
- Can be used on all parts of the body (hard and soft)

During this procedure, an ultrasound probe is placed on the skin or a mucous membrane and emits sound energy. The sound energy detects tissues and produces an image of the internal anatomy on a screen called a sonogram.

Ultrasound probes have a handle, body and window. The window is the portion of the probe from which sound energy is emitted into tissue and received. There is a cable that extends from the base of the handle to a plug inserted into the ultrasound machine.

Ultrasound probes come in different shapes and sizes depending on the area of the body being examined and the type of information the sonographer is looking to obtain. There are several types of ultrasound probes available, each designed for a specific use.

An example of the most common are:

- Surface Ultrasound Probes - used for diagnostic scans across healthy skin (e.g. musculoskeletal and vascular/Doppler), the evaluation of wounds (e.g. burn graft evaluation) and the visualisation of medical devices inserted into tissue (e.g. during percutaneous interventions like biopsies).
- Endocavity Ultrasound Probes - used for Transvaginal (TV) ultrasound, transrectal (TR) ultrasound and needle guidance, e.g. transvaginal oocyte retrievals and transrectal prostate biopsies.

The expanded use of ultrasound underscores the need for standardised ultrasound probe disinfection practices, correct storage and handling, regular maintenance and inspections, and timely repair or replacement of damaged probes. If each step is not carried out properly then patients are put at risk of cross-contamination.

Standardisation ensures best practices are adhered to, accurate diagnosis, patient safety, cost-effectiveness, and regulatory compliance.

Have more questions for this expert? Contact Ellie at: e.wishart@nanosonics.com

Beyond Clean UK&I Ultrasound Probe Expert™ Biography:

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As Medical Affairs Manager for UK & IRE for Nanosonics, Ellie Wishart is responsible for engaging with thought leaders and key organisations on infection prevention & decontamination topics and coordinating the regional podium strategy and educational activities. Ellie works closely with the sales & marketing teams to empower education, practical knowledge and best practices in Infection Prevention and decontamination.

Ellie has a degree in Microbiology from University College Dublin, Ireland and has been involved in the provision of Infection Prevention solutions to Healthcare facilities for over 20 years in a previous role and has worked as Microbiology Laboratory Manager and Life Sciences & Medical Device Cleanroom consultant.

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