



Statement for the General Public on the Safety of Medical Ultrasound Imaging

Ultrasound has been widely used in medical imaging since the 1960s. In medical circles it is recognised as an extremely useful and safe tool; it has benefits to the patient that greatly outweigh any potential risks when used for a justified medical purpose and by a suitably trained operator.

There is no evidence that diagnostic ultrasound has ever produced any harm to adults, children or the human foetus and embryo. However, laboratory tests have shown that ultrasound can cause heating and other potentially harmful effects inside the human body if used at inappropriate power levels or for prolonged periods.

To safeguard against these risks, guidelines exist to ensure the operator minimizes the exposure levels, keeping them within a safe range.

Hence, the British Medical Ultrasound Society (BMUS) considers medical imaging to be safe when it is performed:

- for a clear clinical indication or for appropriate and recognised training of health care practitioners
- using well maintained equipment,
- by properly trained professionals
- and that the ultrasound exposure is kept as low as reasonably achievable (ALARA principle).

All unnecessary exposure to the human body should be avoided as it provides no medical benefit to outweigh any potential harm. In particular, ultrasound should not be used on pregnant women solely for 'entertainment' or 'bonding' purposes.

**Prepared by the Safety Group
of the British Medical Ultrasound Society
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For further explanation on the safety of medical ultrasound, please read EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) Clinical Safety Statement for Diagnostic Ultrasound, 2016.