

STANDARD OPERATING PROTOCOL for Cleaning and Decontamination of Ultrasound Equipment in Acute Services, NHS Lothian,

Site	All acute sites	Modality	Non-invasive Procedures: Echocardiography Diagnostic ultrasound eFAST (if penetrating injury/presence of external blood) Percutaneous (semi-critical) Procedures Using Point of Care Ultrasound: Vascular Access Peripheral Nerve Blockade Aspiration or Drainage of Blood, Ascitic, Pleural or other fluid Pericardiocentesis Invasive Procedures: Transvaginal Ultrasound Transrectal Ultrasound
Department	DATCC, Emergency Medicine, Medicine, Surgery, W+C.	Location	All Areas

Title:	Cleaning and decontamination of ultrasound equipment
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Decontamination of the ultrasound equipment is the responsibility of the user immediately after use.

When used for procedures listed above:

1. Diagnostic or non-invasive ultrasound examination with intact skin:
 - Clean with neutral detergent wipe suitable for medical devices (e.g. Clinell detergent wipe) between patients.
 - Cleaning should begin at the monitor and finish at the transducer head. It should include the probe holder.
2. Diagnostics or non-invasive with non intact skin:
 - For any procedure where there is a potential to breach the skin, a sterile sheath must be used.
 - If the skin has not been breached then cleaning with a detergent wipe is all that is required, as described above in (1).
 - If the skin has been breached but a probe sheath has been used then cleaning with a detergent wipe is all that is required.
 - If the skin has been breached and come into contact with a part of the

probe not covered by a sheath or there is visible contamination of any part of the probe then decontamination is carried out using Tristel 3-wipe system.

3. All procedural work including central and peripheral vascular access where skin is breached (e.g. central venous catheter insertion):
 - Sheath must always be used. Clean immediately afterwards with a detergent wipe, as described above.
 - If the sheath has been breached accidentally by the needle or there is visible contamination of any part of the probe then decontamination is carried out using Tristel 3-wipe system or other high level decontamination technique (see below).
4. Invasive procedures where ultrasound probe is inserted in to a body cavity (e.g. transvaginal ultrasound):
 - Sheath must always be used. Clean immediately afterwards with a detergent wipe, as described above.
 - Decontamination must be carried out between uses using Tristel 3-wipe system or other high level decontamination technique (see below).

High Level Decontamination (HLD)

Recommended HLD techniques for ultrasound decontamination are: Tristel 3-wipe system, Ultraviolet Light or Peroxide. In most point-of-care settings the Tristel system will be the most convenient method of HLD but in high use areas (e.g. Radiology) Ultraviolet Light or Peroxide systems may be appropriate. Advice on these systems is available from Medical Physics, NHS Lothian Decontamination Lead or Radiology.

Version	Authorisation	Review Date	Authors
Final		1 st May 2021	Dr Michael Gillies Ms Gill Ellis Pow Mrs Lindsay Guthrie Dr Graham McKillop Dr Oliver Robinson