Decontamination Procedure for high level disinfection of Semi-critical Ultrasound Probes (Semi-invasive and Non-invasive): using a manual (chlorine dioxide) multi - wipe system.

1. PURPOSE

These operating instructions describe the method for decontamination of ultrasound probes using a manual (**chlorine dioxide**) multi-wipe system. This is a manual process to achieve high level disinfection with a series of impregnated wipes that separately clean, disinfect and then rinse the probes.

2. RESPONSIBILITIES

The User (unit manager) has overall responsibility for the ultrasound probe decontamination procedures within the department.
The Operator (person undertaking decontamination of ultrasound probes) performs this procedure.

3. PROCEDURE

Decontamination procedures should be performed in a designated room/area preferably separate from the clinical area. However, HAI risk-assessed procedures in the patient area are currently an acceptable solution where the ultrasound probe cannot be disconnected or there is no designated room/area separate from the clinical area (see NHSScotland guidance document for further information). **These are manual decontamination procedures and to be fully effective, manufacturer's instructions must be strictly adhered to.**

3.1 PREPARATION

Check the expiry/use by date on the product, if applicable.
Do not use if past the use by date.

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Take one of each type of wipe (pre-clean, disinfect and rinse) from the box and have ready for use and place on the work surface.

3.2 PRE-CLEANING OF PROBES – essential requirement

Perform hand hygiene and put on clean PPE (apron and gloves).

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Immediately after patient use inspect the protective sheath for integrity. Remove all accessories and the sheath from the probe. Using a low-linting wipe remove the ultrasound gel and dispose of the sheath and wipes in the clinical waste.

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Dispose of any single use accessories (e.g. biopsy needle guide) into the appropriate waste stream (SHTN 3).

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Any reusable accessories needing sterilization should reprocessed following manufacturer's instructions in a Central Decontamination Unit. Contact the Infection Prevention and Control Team or CDU manager.

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*Disconnect the probe from the console if recommended by the manufacturer and transport to the designated decontamination area. (See Transport and Storage SOP).

(*If decontamination requires to be in the patient area, ensure that there is clear segregation between dirty and clean processes.)

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Remove the pre-clean wipe from the sachet and unfold into palm of the hand. Retain the sachet for the bar code to enter into the audit trail book provided by the wipe manufacturer.

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Wipe the full length of the probe and cable to remove all visible soiling. More than one wipe may be required if heavily soiled.

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Discard wipe and PPE to clinical waste, perform hand hygiene and put on clean PPE.

3.3 INSPECTION

After pre-cleaning the probes are examined by the operator for cleanliness, damage and functionality. Ensure there are no signs of discolouration or cracks, giving particular attention to the probe tip.

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Report any non-compliance to the User. When appropriate, label and segregate the probe to prevent use.

3.4 DISINFECTION

Remove the disinfectant wipe from the sachet and unfold into palm of the hand. Retain the sachet for the bar code to enter into the audit trail book.

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Activate the wipe as indicated in the manufacturer's instructions ensuring the wipe is completely covered in foam.

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Carefully wipe the entire surface of the probe and cable ensuring contact with the disinfectant for the time recommended in the manufacturer's instructions.

3.5 RINSE

After the indicated contact time with disinfectant, remove the rinse wipe from the sachet and unfold in palm of hand. Retain the sachet for identification purposes e.g. enter the bar code into the audit trail book.

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Wipe the full length of probe and cable thoroughly to remove excess disinfectant.

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Discard used wipe and PPE to clinical waste.

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Record all three sachet bar codes in the audit trail book and affix labels to patient notes as indicated.

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Clean the probe holder on the ultrasound console, with detergent wipes recommended by the console manufacturer. Replace the probe in the cleaned console holder ready for next use.

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Remove PPE carry out hand hygiene and put on fresh PPE.

3.6 INSPECTION – post disinfection

After rinsing and drying, inspect the probe to ensure there are no signs of discolouration or cracks, giving particular attention to the probe tip.

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Report any non-compliance to the User. When appropriate, segregate and label the probe to prevent use.

4. PRODUCT RELEASE

4.1 After completion of the decontamination process, review the process to ensure acceptance criteria are being met:

- Visual inspection 'pass';
- Traceability records complete.

4.2 The product is released after meeting the acceptance criteria and the completion of the traceability record. Traceability labels are attached to the patient records and system log books.

4.3 If a non-conformance is found during inspection of the ultrasound probe, the management is informed in order to decide the appropriate corrective actions.

5. VALIDATION, TESTING AND MAINTENANCE

This is monitored by the User (e.g. unit manager)

5.1 INSTALLATION, COMMISSIONING AND VALIDATION

Not applicable.

5.2 ANNUAL AND PERIODIC TESTING

Not applicable

5.3 MAINTENANCE AND ROUTINE CLEANING

Not applicable

5.4 FAULTS-probe

The Operator records the fault, then notifies the User.

The User investigates the fault. If unresolved, contact the local estates department (if it does not conflict with the service contract) and the manufacturer/supplier for repair.

When complete, the User checks the replacement is satisfactory. The Operator retains a record of the replacement in the Decontamination Manual.

6. RECORDS

System log book
Traceability records