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| Section: UTMB On-line Documentation  | 01.39 - Policy    |
| Subject: Infection Control & Healthcare Epidemiology Policies and Procedures | Revised: 12.16.19 |
| Topic: 01.39 - Safe Ultrasound Practice                                      | 2013 - Author     |

## 01.39 – Safe Ultrasound Practice

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| Purpose  | To provide a process that renders Ultrasound Transducers safe for patient use.  |
| Audience   | All healthcare workers in UTMB hospitals (LCC, CLC, ADC and Galveston) and clinics.   |
| Policy   |   |
| Definitions Regarding Uses Types of Ultrasound Transducers | <ul style="list-style-type: none"> <li>• External Transducers: Only come into contact with clean, intact skin. Used for noninvasive procedures. Spaulding Classification is considered a noncritical device. (eg. linear, curvilinear and passed array) (15, 16)</li> <li>• Ultrasound guided Interventional percutaneous Transducers: Used for Percutaneous needle or catheter placement, such as vascular access (PIV, Midline, PICC, CVC, Arterial line), thoracentesis, paracentesis, arthrocentesis, pericardiocentesis, lumbar puncture, ultrasound-guided regional/local anesthesia, and other percutaneous procedures. (15, 16)</li> <li>• Internal Transducers: Comes in contact with non-intact skin and mucous membranes. Spaulding Classification is considered Semi-Critical device. (eg. Vaginal, gastric, rectal and transesophageal). (15, 16)</li> </ul> |
| Cover Usage  | <ul style="list-style-type: none"> <li>•—External Transducers: Cover is optional.</li> <li>•—Ultrasounded guided Interventional percutaneous Transducers: Use a single use sterile transducer cover. (15, 16)</li> <li>• Internal Transducers: Use a single use sterile cover preferred but non-sterile is allowed. (15, 16)</li> <li>• Use a single use sterile transducer cover for all neonates patients.</li> </ul>   |
| Ultrasound Gel Use   | <ul style="list-style-type: none"> <li>• External Transducers: Use bacteriostatic single use packets preferred but non-refillable gel bottles allowed. (1, 6, 8)</li> <li>• Ultrasounded guided Interventional percutaneous Transducers: Use single use sterile packets. (1, 3, 15, 16)</li> <li>• Internal Transducers: Use sterile, single use packets preferred but bacteriostatic, non-refillable gel bottles allowed.</li> <li>• Neonates: <ul style="list-style-type: none"> <li>– Use sterile ultrasound gel for all procedures on neonatal patients. (1, 9, 10)</li> </ul> </li> </ul>  |

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- Isolation:
  - Use a bacteriostatic single use gel packet.

**Non-Refillable Gel Bottles**

- Non-Refillable bottles of ultrasound gel must have a discard date written on them when they are first opened. The discard date is 30 days from when the bottle was opened or by the manufacturer's expiration date, whichever comes first.
- Dispensing nozzles must not come into direct contact with patients, staff, instrumentation or the environment. Dispense the ultrasound gel from the bottle into a cup or onto a disposable cloth; if this is not possible, wipe the dispensing nozzle with a clean alcohol swab between patients.

**Gel Warming**

- Warm ultrasound gel only when needed.
- Dry heat should be the only method used to warm gel. (16)
- Bottles should be removed from the warmer as soon as possible and dried immediately. Do not store the ultrasound gel bottles in the warmer throughout the day.
- Gel warmers must be cleaned weekly according to manufacturer's instructions for use with a low-level hospital grade disinfectant.
- Gel warmers should be cleaned and disinfected regularly according to the manufacturers' Instruction for Use. (16)

**Storage**

- Ultrasound gel should be stored in an area that is dry and protected from potential sources of contamination such as dust, moisture, insects and rodents.
- If evidence of potential contamination is present, or if the package integrity has been breached, the ultrasound gel must be discarded immediately. (11-14)

| Indication   | Type of Gel |                |
|--|-------------|----------------|
|  | Sterile     | Bacteriostatic |
| Procedures with mucosal contact (esophageal, gastric, rectal and vaginal)  |             | X              |
| Non-intact skin  |             | X              |
| Intact skin  |             | X              |
| Pediatric and NICU patients  | X           |                |
| Vascular access device insertions (PIV, Midline, PICC, CVC, Arterial line) | X           |                |
| Ultrasound-guided biopsy or other sterile procedure                        | X           |                |

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