ANZ Guidelines

HLD requirements for endocavitary and critical ultrasound probes

HLD is required for endocavitary probes even if a sheath is used

ACIPC & ASUM 2017

"Ultrasound transducers that come into contact with non-intact skin and/or mucous membranes... are considered as semi-critical medical devices due to the high risk of potential contamination. These transducers are reprocessed by cleaning followed by a High-Level Disinfection (HLD) method as described in Section 7.2 'High level disinfection'." [14]

AS 5369:2023

"Semi-critical RMDs [Reusable medical devices]/ other devices: cleaning followed by high-level disinfection at a minimum. Sterilisation of these items is strongly recommended." [15]

HLD is minimally required for critical ultrasound probes even if a sheath is used

AS 5369:2023

"RMDs [Reusable medical devices]/other devices that come into contact with sterile body cavities or are used on the critical aseptic field during invasive procedures shall be considered critical medical devices. These devices shall be reprocessed to the highest level that they can tolerate between uses on individual patients/clients in accordance with the reprocessing instructions. followed by high-level disinfection at a minimum.

Cleaning, disinfection or sterilisation, as appropriate, of RMDs/other devices shall be performed between uses even if a single-use sheath/sleeve/protective barrier is used. Single-use sheaths/sleeves/ protective barriers for RMDs/other devices shall not be used as a substitute for cleaning, disinfection or sterilisation." [15]

ACIPC & ASUM 2017

"3.3 Critical devices. Transducers are extremely delicate and heat-sensitive and as such are reprocessed as a semi-critical medical device by cleaning followed by an HLD method as described in Section 'High level Disinfection'. An appropriate sterile sheath or transducer cover is applied, allowing it to be used on the critical aseptic field (AS/NZS4187:2014 Clause 5.1.3 (e))." [14]

"If the transducer comes in direct contact with non-intact skin, blood or mucous membranes transducers should be cleaned with HLD irrespective of the use of a transducer cover." [14]

HLD is preferred for ultrasound probes used in interventional procedures by the College of Intensive Care Medicine of Australia and New Zealand (CICM)

"Considering all risks, the specifics of ICU practice as well as the minimal time and cost difference between options, HLD is preferred and recommended over LLD as the standard of care following ultrasound-guided procedures within ICU." [16]

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HLD: High level disinfection. ICU: Intensive Care Unit. RMD: Reusable Medical Device. **References: 1.** Oide S et al. J Med Ultrason. 2019;46(4):475-479. **2.** Ma ST, et al. Emerg Med J. 2013;30(6):472-475. **3.** M'Zali et al. PLoS One. 2014;9(4):e93368. **4.** Leroy S. J Hosp Infect. 2013;83(2):99-106. **5.** Westerway SC, et al. Ultrasound Med Biol. 2016;43(2):421-6. **6.** Keys M, et al. Crit Care Resusc. 2015:17(1): 43-46. **7.** Ngu A, et al. Infect Control Hosp Epidemiol. 2015;36(5):581â•fi584 **8.** Currie K, et al. Am J Infect Control. 2018;46(8):936-42. **9.** Haque M, et al. Infect Drug Resist. 2018;11:2321-2333. **10.** EDCC surveillance report. Point prevalence survey of healthcare-associated infections and antimicrobial use in European acute care hospitals 2011-2012, 2013. **11.** Mitchell B.G. et al. Infection, Disease and Health. 2017; 22, 117-128.**12.** Russo M, et al. Antimicrob Resist Infect Contr. 2019;8:114/. **13.** Schreiber PW et al. Infect Control Hosp Epidemiol. 2018;39(11):1277-1295. **14.** Australasian College for Infection Prevention and Control (ACIPC), Australasian Society for Ultrasound in Medicine (ASUM). Guidelines for Reprocessing Ultrasound Transducers.Australas J Ultra Med. 2017;20(1):30-40. **15.** 15. Standards Australia (AS). 5369:2023 Reprocessing of reusable medical devices and other devices in health and non-health related facilities. 2023. **16.** College of Intensive Care Medicine of Australia and New Zealand (CICM). Prevention of pathogen transmission during ultrasound use in the Intensive Care Unit: Recommendations from the College of Intensive Care Medicine Ultrasound Special Interest Group (USIG). Date accessed: 14th of May 2020. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/ajum.12205. **Manufacturer:** Nanosonics Limited, 7-11 Talavera Road, Macquarie Park, NSW 2113, Australia. *Nanosonics* and *trophon* are registered trademarks of Nanosonics Limited. NAN1106. MM01512-ANZ-BR-V4. March 2024.