Preventing Infections in Endoscopic Procedures

More than 20 million gastrointestinal (GI) endoscopic procedures are performed annually in the United States. While rare, patients have acquired infections from these procedures due to:

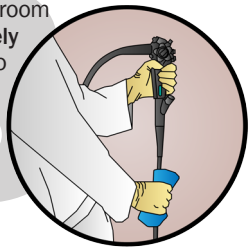
- Poor cleaning/disinfection of equipment and/or
- Lapses in infection prevention practices and/or
- Defective or poorly maintained endoscopic or reprocessing equipment

To help prevent infections, health care professionals in the endoscopy suite should:

Verify that **ALL** staff who perform cleaning and disinfection of GI endoscopes are **trained and competent** to do so **per the manufacturers' instructions for use (IFU) and facility policy.** Have vendors/other expert trainers deliver updated education on the proper cleaning/disinfection of scopes.

Ensure appropriate **personal protective equipment** is worn at all times and that the reprocessing room has appropriate ventilation.

Preclean endoscopes in the procedure room **immediately after use** to remove debris. Do not allow debris to dry.

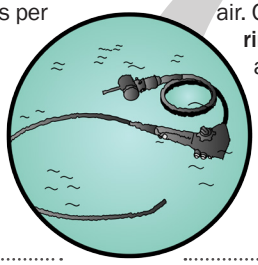


Transport the soiled GI endoscopes (after the precleaning) to a **designated reprocessing area** in a manner to prevent contamination of other equipment or surrounds (e.g., in a closed container or cart that is **leak-proof, puncture-resistant, and labeled "biohazard"**).

Perform leak testing before manual cleaning to ensure the scope does not leak by using a wet or dry process according to IFUs. If using a wet process, attach the leak test device before placing the scope into clean water.

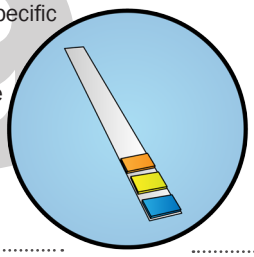
Meticulously manually clean the disassembled scope using sponges/endoscope specific brushes per manufacturer's IFU. Brush all channels with **correctly sized brushes per IFU**. For each scope, use a freshly prepared detergent solution and type of water (varies) recommended by IFU to help prevent cross contamination.

Submerge scope during cleaning to reduce aerosolization into the air. Completely **rinse** scope after cleaning to remove all residue. **Dry** exterior of scope with lint-free cloth.



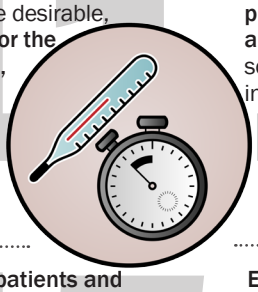
Purge all channels with regulated instrument air. **Inspect scope** visually with **lighted magnification** after cleaning and before high-level disinfection for possible re-cleaning or repair.

Test high-level disinfection solution for efficacy with manufacturer-specific test strip before each cycle and document results.



Perform high-level disinfection of scopes after thorough cleaning **ensuring and documenting correct time and temperature.** Ensure **use of proper connectors** between scope and automatic endoscope reprocessor (AER). **Submerge** scope either manually or in AER during all cycles of processing.

If risk assessment indicates that alcohol flushing and forced air drying are desirable, **follow IFUs for the specific AER, endoscope model, and channel.**



Verify and/or document entire cycle completed as programmed, including rinsing and drying, prior to removing scope from AER. If cycle is interrupted, repeat entire cycle.

Identify scope as processed/ready to use and store scopes vertically (or horizontally in drying cabinet per IFUs) with all valves open and removable parts detached but stored with scope; ensure scopes are not touching cabinet or each other.

Ensure the facility has a written **policy regarding storage time** before endoscopes need to be reprocessed again.

Encourage patients and families to discuss with their physician the benefits, risks, and alternatives of endoscopic procedures; reinforce importance of asking their physician what to expect after the procedure and when to seek medical attention.

Empower patients and families to insist that all team members wash their hands before providing care; encourage patients and families to perform hand hygiene as well.

References

- Guideline for Processing Flexible Endoscopes. In: Guideline for Perioperative Practice. Denver,CO:AORN,Inc;2016:675-758.
- Society of Gastroenterology Nurses and Associates. Standards of Infection Prevention in Reprocessing Flexible Gastrointestinal Endoscopes. 2016: http://www.sgna.org/Portals/0/Standards%20for%20reprocessing%20endoscopes_FINAL.pdf.
- ANSI/AAMI ST79:2015 Flexible and Semi-Rigid Endoscope Processing in Health Care Facilities. Arlington, VA: Association for the Advancement of Medical Instrumentation; 2015.
- Multi-Society Guideline for Reprocessing Flexible Gastrointestinal Endoscopes. Gastrointestinal Endoscopy. 2011;73(6):1075-1084. PMID: 21628008.

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