West Virginia Department of HEALTH

Reprocessing Semicritical Equipment: Endoscopes and Endocavitary Probes

Infection Prevention and Control Guidance-May 2025

Surgical and other invasive procedures have shifted from a service primarily performed in acute care hospitals to a common procedure in skilled nursing facilities, provider offices, and other healthcare settings. While this has positively impacted the availability of medical care and convenience for stakeholders, the Center for Disease Control and Prevention (CDC) recognizes that these settings may lack the resources to implement a strong infection prevention and control program to address the increased risk of related healthcare associated infections. The following information is to be used as a point of reference to prompt a review of all procedures and equipment used in a healthcare facility to ensure proper cleaning, disinfection and sterilization processes are being followed.

Endoscopes and Endocavitary Probes

- An endoscope is inserted through an opening into the body to visualize tissues and organs. Some examples are gastrointestinal endoscopes, bronchoscopes, nasopharyngoscopes, laryngoscopes, and cystoscopes.

- An endocavitary probe is inserted through an opening in the body to perform ultrasounds of tissues and organs. Some examples are transvaginal, transrectal, transesophageal probes, and esophageal manometry probes.

Spaulding Classification

- Endoscopes and endocavitary probes are categorized as semicritical items.
- Germicidal activity is categorized as high-level disinfection.

Semicritical Equipment

- Is medical or surgical equipment that may contact mucous membranes or non-intact skin.
- Requires high-level disinfection at a minimum.

High-level Disinfection

- Is a process that eliminates microorganisms from equipment, except for small numbers of bacterial spores.
- Follow manufacturer's instructions for preparation, testing, temperature, duration, storage, and replacement.
- Disinfectant products can be harmful. Read and follow the manufacturer's instructions and all safety information before use.
- If harmful/hazardous chemicals, equipment or waste are being transported, review and follow all manufacturer's instructions, local, state, federal and other regulatory requirements.
- U.S. Food and Drug Administration (FDA) approved High-level Disinfection products for reprocessing reusable medical devices can be found at: www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/reprocessing-reusable-medical-devices-information-manufacturers

Reprocessing Procedures for Semicritical Items

- **Cleaning**: Should be started as soon as possible. Use brushes, water, and detergent or enzymatic cleaner to remove debris and prepare the item for safe handling and/or further decontamination.
- **Inspection:** Visually assess items for debris or damage.
- **High-level Disinfection**: is required at a minimum for semicritical items. Follow the manufacturer's instructions.
- **Rinsing:** Follow the manufacturer's instructions.
- **Drying:** Follow the manufacturer's instructions.
- **Packaging:** Follow the manufacturer's instructions.
- **Storing:** Follow the manufacturer's instructions. Ensure that the equipment is protected from becoming damaged or contaminated and promotes drying.
- If the item is contaminated, packaging has been compromised, or any other question of integrity, it should be reprocessed before use.
- If contaminated semicritical items are being transported to further facilitate the reprocessing process, review and follow all manufacturer's instructions, local, state, federal and other regulatory requirements.

Reprocessing Area

- Located in a space that is separate from the procedural area.
- Ensure a directional airflow that maintains negative pressure within the room where the cleaning process occurs relative to adjoining spaces.

- Ensure a “one way” workflow that separates contaminated workspaces from clean workspaces.
- Ensure that heating, ventilation, and air conditioning parameters are appropriate for the chemicals and equipment in use.
- Staff should have access to a handwashing sink that is separate from the reprocessing sink.
- Install eyewash stations where chemicals that are hazardous to the eye are used.
- Ensure that manufacturer’s instructions, policies, procedures, documentation, and safety data sheets are readily available.
- Provide designated space for record keeping (electronic and/or hard documentation).

Environmental Cleaning

- Integrate environmental services into the hospital's safety culture.
- Select appropriate cleaning and disinfection technologies and products.
- Standardize setting-specific cleaning and disinfection protocols.
- Educate and train all personnel responsible for cleaning and disinfecting patient care areas.
- Monitor effectiveness and adherence to cleaning and disinfection protocols.
- Provide feedback on the adequacy and effectiveness of cleaning and disinfection to staff and stakeholders.

Infection Prevention and Control Program

- Include surgical/invasive procedures on annual risk assessment.
- Review facility policy and procedure.
- Review related local, state, federal or other regulatory requirements.
- Review and follow the manufacturer’s guidelines for cleaning, disinfection and sterilization.
- Ensure adequate supplies are available.
- Educate, train, and perform staff competencies for equipment reprocessing based upon the manufacturer’s instructions, and per local, state, federal and other regulatory requirements.
- Reinforce and follow hand hygiene practices.
- Ensure staff wear appropriate personal protective equipment.
- Monitor for adherence to infection prevention and control practices and provide feedback.
- Perform surveillance.
- Report possible infection control breaches to leadership and others per local, state, federal and other regulatory requirements.

Follow the manufacturer’s instructions, state, federal and other regulatory requirements for the cleaning, disinfection and sterilization of endoscopes, endocavitary probes and other reusable equipment in all healthcare settings.

For additional information and facility-specific information, please visit:

- www.cdc.gov/infection-control/hcp/disinfection-and-sterilization/index.html
- www.cdc.gov/infection-control/hcp/core-practices/index.html
- archive.cdc.gov/#/details?url=https://www.cdc.gov/hicpac/php/about/updates.html
- www.cdc.gov/healthcare-associated-infections/php/toolkit/icar.html?CDC_AAref_Val=https://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html
- www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants
- www.cdc.gov/hicpac/media/pdfs/essential-elements-508.pdf
- www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/reprocessing-reusable-medical-devices-information-manufacturers
- www.osha.gov/sites/default/files/2021-03/Chemical%20Hazards.pdf