

Decontamination Area

Objectives

- Point of use in the procedure room
- Transportation to the CSSD
- Cleaning and disinfection of RMD
- Quality control in the decontamination area
- Cleaning methods in the decontamination area

Point of Use



Point of Use

- Essential step to save the RMD from damage and prevent the infection spread out from the blood, tissues, body secretion present in the surgical instruments.
- Gross soil should removed immediately after procedure by using:
 - Spray solution contain an enzymatic component.
 - Wipe them with pre-clean medical wipes.

For purpose of moisturizing soil which cause rust and corrosion to the RMS if dried on its surface and minimize the microorganism growth.



Point of Use

- Place RMD in biohazard bags or directly in its rigid container then arrange in proper way inside the utility room under restricted sign and specific environmental control standards.
- Dispose all the following items on the procedure room and before sending to the CSSD:
 - Sharp items such as blade, needles
 - Any body fluid or secretion.
 - Gauze, cotton, single use items
- Point of use preparation does not replace the cleaning process



Dirty Transportation



Dirty Transportation

- Contaminated items should be contained while transport from the facility inside transportation box or enclosed transportation cart to reduce the risk of cross-contamination and infection with biohazard labelled sign.
- PPE (Gown, gloves) must be worn before loading sets, transport containers in the carts, discarded then close the cart.
- Consider all precaution if transport to another healthcare facility.
- Don't mix the sterilized/clean items in the dirty cart.

Decontamination Area



Decontamination Area

- Cleaning is removal of all visible and non-visible soil, and any other foreign material from medical devices.
- It is a pre-requisite Step to the disinfection or sterilization step.

Cleaning Tools and Equipment

- Instrument cleaning sink with two or three basins.
- Different size of brushes
- Air guns, Water guns
- Detergents and solution:
 - Alkaline
 - enzyme manual and automated solution
 - Neutralizer
 - rust removal
- Disinfectants (low disinfectants, high disinfectants)
- ultrasonic cleaner, Cart washers
- Washer disinfectors , WD trolley, WD different racks
- Cleaning indicators
- cleaning trays, cleaning tables
- Environmental monitors system



Receiving



Methods of cleaning

Manual cleaning

Followed by

- ✓ Manual disinfection



Mechanical Cleaning







Followed by

- ✓ Washer disinfectors.
- ✓ Ultrasonic cleaners.



Spaulding Classifications

RMD reprocessed to appropriate level depends on the **body sites** where the device will be used and the risk associated with a particular procedure.

Patient Contact	Examples	Device Classification	Minimum Inactivation Level
Skin surface non-invasive	 	Non-Critical	Cleaning and/or Low/ Intermediate Level Disinfection
Mucous membranes or non-intact skin	 	Semi-Critical	High Level Disinfection
Sterile areas of the body, including blood contact	 	Critical	Sterilisation

Manual Cleaning

- The first sink for cleaning should be filled with water having temperature range of 27°C - 44°C, enzymatic detergent solution.
- The second sink for initial rinsing with plain or softened (de-ionized) water that should be changed frequently If manual disinfection process after manual cleaning.
- Disassemble all complex devices and open all jointed instruments.

Manual Cleaning

- Use soft or SS bristle brushes to clean serrations and box locks without harm or damage the instrument surface.
- Cleaning should be under the surface of the water to reduce the risk of aerosol production and in to and fro motion.
- Items such as (Electric-Powered, Pneumatic-Powered, Battery-Powered, delicate eye devices, Lenses rigid scope, fiber optic devices cables) can not be emersed under water so follow the IFU.

Washer Disinfecter

- Technician should use correct rack
- Washer racks should never be overloaded
- Spray arms should move freely during operation
- Delicate and small instruments may be load in tea mesh
- inspection and cleaning of spray arms, strainers.
- For WD efficiency tests use: protein test, water PH and hardness, washers' temperature test



ULTRASONIC CLEANERS

- Ensure that the manufacturer's recommendations are followed regarding the ultrasonic cleaner detergents are compatible.
- For cannulated instruments, it should be flushed and brushed before load in the ultrasonic.
- Ultrasonic Water must be degassed daily and after changing sonic cleaner for 5 to 10 minutes. De-gassing is the process of releasing dissolved air bubbles.
- Water should be changed when it is visually soiled or at regularly scheduled intervals to prevent soiled particles from re-depositing on instruments.



Thanks
