

Section: UTMB On-line Documentation	02.04 - Policy
Subject: Infection Control & Healthcare Epidemiology Policies and Procedures	5/22/25- Revised
Topic: 02.04 - Cardiac Catheterization Laboratory	1994 - Author

02.04 - Cardiac Catheterization Laboratory

Purpose	To provide infection control guidelines for patient care in the Cardiac Catheterization Laboratory.
Audience	Cardiac Catheterization Laboratory personnel.
Personnel	• Personnel shall adhere to the departmental dress code. • Eating and drinking shall be confined to designated areas. • Personnel shall comply with Employee Health Center guidelines for their area. • Hand hygiene shall be performed before and after each patient contact and after the removal of gloves. • Traffic shall be monitored and kept to a minimum. Restricted areas shall be accessed by essential personnel only. • All employees with cuts, lacerations or other breaks in the skin of their hands shall wear gloves when there is any possibility of contact with blood or other body fluids. • Uniforms soiled by blood or body fluids shall be changed as soon as possible. • The Exposure Control Plan shall be followed for any and all contact with blood and body fluids. (Healthcare Epidemiology, Policy 01.32) • Isolation will be initiated for any patient known or suspected of having a communicable disease. • Gloves shall be worn when touching or cleaning items contaminated with blood or other body fluids. • Personal protective equipment shall be readily available in all treatment areas. • Corrugated cardboard boxes in which materials are shipped to UTMB must not be kept in procedure rooms or sterile supply rooms.
Cardiac Catheterization Procedures	• Prophylactic antibiotics are not recommended for cardiac catheterization procedures. • For those cases in which contamination of the lower extremities with blood is likely, the operator will wear disposable boots and will require that all other personnel participating in the procedure wear disposable boots. • Mask, surgical hat or scrub cap, and beard covering (for beards not well-covered by surgical masks) should be donned before scrubbing.

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Hand and Forearm Preparation

- Fingernails should be cleaned under running water. Hands and forearms should be thoroughly washed up to the elbows with foam soap. Hands and arms should then be rinsed with water and **thoroughly** dried with paper towels. Alcohol hand rub (gel) should be applied to hands and forearms up to the elbows twice so that the skin of the hands and forearms remain wet during the applications. After the alcohol dries, a sterile gown and gloves can be donned. Alcohol can then be used between cases throughout the day as long as the hands are not visibly soiled.
- Masks, caps or scrub hats, and beard covers (as needed) must be worn at all times during preparation of the sterile field and during the cardiac catheterization procedure. Masks must fit firmly around the face completely covering nose and mouth. Caps/hats must contain all hair. Sterile gloves must immediately be donned after hand hygiene without touching any unsterile surfaces. Sterile gowns must completely cover the front and back of the operator.
- Using an electric clipper, hair should be removed from potential access sites. Inguinal areas should be clipped from the waistline to 3 inches past the inguinal area. Skin preparation should be performed wearing sterile gloves. Circulators should prep the skin at the catheter insertion site with colored Chloraprep applicators starting from the insertion site to the outer most areas in a back-and-forth motion. Apply Chloraprep to the insertion site for thirty seconds for dry areas (e.g. abdomen, arm) or two minutes for wet areas (e.g. inguinal fold, axilla). Use one Chloraprep applicator per site. Chloraprep solution must be permitted to dry completely for a minimum of three minutes before draping the patient. After skin is prepped, discard gloves, perform hand hygiene and don a sterile gown and new pair of sterile gloves. **Do not double glove.**
- Patient drapes must adhere to the skin around the arterial access site.
- All unsterile items in use during the procedure must be covered with sterile drapes. This includes the lead shield, SID, and contrast injector.
- During the procedure, any item on the sterile field that becomes contaminated (unsterile), must be immediately removed and discarded. The area from which the unsterile item was removed will be covered with a sterile towel(s).**
- All personnel donned in sterile attire must remain in the procedural area or completely scrub out and perform hand hygiene, apply new sterile gloves and gown on return to the sterile field. **The procedural area does not include the control room, because this is an unsterile area.**
- After the procedure, personnel who clean up and disinfect surfaces should wear gloves and a waterproof gown.
- All disposable items are to be discarded in appropriate containers/areas. Linen shall be bagged to contain all body fluids. All equipment and surfaces should be thoroughly cleaned with Cavicide wipes. If blood is present on any equipment, blood shall be cleaned with Clorox Bleach Germicidal Wipes and the wet time observed.

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- New medications should be prepared for each case. Multidose vials are not permitted for use. Wipe the vial stoppers with alcohol before withdrawing medication. Wipe IV hubs with alcohol as indicated by hospital policy.
- Sheath pulls must be performed wearing **sterile gloves** while in the procedure room or outside of the procedure room.
- After the sheath is removed, the operator should remove his gloves, perform hand hygiene with an alcohol-based hand rub and don a new pair of sterile gloves.

Management of Femoral and Radial Artery Puncture Sites

- The skin around the puncture site should be prepped with a Chloraprep applicator. Any blood at the site should be removed. Use a second Chloraprep applicator if needed.
- When a vascular closure device (VCD) is applied with sutures, the sutures should be cut so that the ends retract well below the skin.
- Do not apply a topical antibiotic ointment to the site.
- Cover the site with a sterile transparent semipermeable dressing.
- If the patient is diaphoretic or the site is bleeding or oozing, use a sterile gauze dressing.
- Drapes must adhere to the patient's skin around the access site.

Equipment & Supplies

- All disposable single use items shall not be reprocessed and reused. All equipment contaminated with blood or other body fluids shall be decontaminated by appropriate means prior to being serviced.
 - Gloves shall be worn by the person who decontaminates the equipment.
 - When equipment cannot be decontaminated prior to servicing, a sticker displaying the biohazard symbol shall be attached.
 - The area(s) contaminated shall be written on the front of the sticker.

References

- Naidu SS, Abbott JD, Bagai J, et al. SCAI expert consensus update on best practices in the cardiac catheterization laboratory. *Catheter Cardiovasc Interv.* 2021; 98: 255–276. <https://doi.org/10.1002/ccd.29744>
- Becton Dickson. (2014). *Chloraprep® 10.5 mL applicator*. New Jersey:CareFusion. Retrieved from: www.bd.com/content/dam/bd-assets/na/surgery/documents/in-service-material/ip_chloraprep-10-5mL-poster_im_en.pdf