

Department of Radiology
Radiation Oncology

PURPOSE:

To provide optimum patient care and minimize the risk of healthcare-associated infection within the Department of Radiology with adherence to established procedures and guidelines in the handling of equipment and in the performance of procedures.

POLICY:**I. GENERAL INFECTION CONTROL PRACTICES**

- A. Standard precautions are used for all patients.
- B. Patients are assessed in waiting rooms and during procedures for any infectious process. If a patient has a respiratory infection, they are placed in a private waiting room as soon as possible.
- C. Gloves are worn when handling any body fluids from any patient. Hands are washed when gloves are removed. Gloves are changed between patients. Gloves are worn when it is anticipated that personnel may have contact with blood and body fluids, other potentially infectious materials, mucous membranes and non-intact skin. Gloves are worn when performing vascular-access procedures and when handling contaminated items.
- D. Splash-proof gowns, goggles, and masks are available if there is a possibility of splashing of body fluids of any patient.
- E. If a patient and/or visitor is coughing, he is given a tissue and/or a submicron mask is available to prevent respiratory infection. If excessive coughing, the patient is placed in a single room as soon as possible.
- F. When dealing with a patient in isolation precautions, personnel refer to the Infection Control B.I.T. which includes the Bloodborne Pathogen, Isolation, Tuberculosis Control Plans. (Nursing Service should notify the department when the patient is in isolation). If there is any question, the Infection Control practitioner is notified.

- G. Handwashing-Routine Patient Care: For routine patient contact, handwashing for 20 seconds with soap and water before and after contact with any patient is done. Friction is needed to mechanically remove the bacteria. Handwashing is performed using antimicrobial soap and water if grossly soiled. Hospital approved alcohol hand sanitizer is used in rooms where there are no sinks available. Refer to IC Policy 2.0, Hand Hygiene.
- H. IV catheters and needles in place are not disturbed. If the IV stops, the radiology nurse will check the site and notify the nurse on the ward.
- I. When handling patients with indwelling urinary catheters, care is taken not to elevate the drainage bag above the bladder. At no times is the bag placed in the patient's bed.
- J. Sterile dressings are changed as needed. If a dressing is removed, it is replaced using sterile gloves and sterile dressings.
- K. Disposable gloves are worn when staining skin with ~~Black tattoo~~ Steri-Tatt ink. They are used once and discarded.
- L. The Radiation Oncology personnel will clean lead apron as needed for removal of contaminants. Lead apron will be cleaned with hospital approved disinfectant.
- M. Processing with Glutaraldehyde (Cidex)
1. Personal protective equipment (gloves, gown, eyewear, mask).
 2. Glutaraldehyde is kept in a controlled area. Containers are kept covered to prevent the fumes from disseminating into the air. The room should have at least 10 air exchanges.
 3. The door to the processing room is kept closed at all times.
 4. Used instruments are cleaned thoroughly with instrument clearer solution, rinsed and dried. Hands are washed between the decontamination stage and the disinfectant stage.
 5. The instrument is soaked 45 minutes in Cidex, 2.4%.
 6. Glutaraldehyde is tested daily before placement of instruments using test strips with results recorded in a logbook.
 7. The dry instrument is stored in a clean dry area.
 8. Glutaraldehyde is discarded in the appropriate container every 14 days or sooner if solution becomes diluted or soiled.
 9. Discard date is placed on disinfectant containers when opened at the time of initial use.
 10. Safety is responsible for cleaning up any spills of Cidex.
- N. When IV are started, the skin is prepped with 70% alcohol swabs or

chloraprep sepps. Refer to IC 22.0 Skin Preparation for Invasive Procedures.

II. OCCUPATIONAL HEALTH

- A. Occupational Health Guidelines are followed. All new employees are initially evaluated by Occupational Health Clinic. Annual evaluations are required thereafter. All employees are encouraged to keep immunizations current. Supervisors should promptly schedule all employees with OHC for evaluation, immunization, and follow-up as appropriate.
- B. Any employee with a skin infection, weeping lesions or potentially transmissible infection must report to their supervisor immediately, who will refer to OHC as appropriate. Employees will not work if they are known or suspected of having a communicable disease.
- C. Any patient with TB or rule out TB status shall be placed in a negative pressure room. These patients are made a priority. If a negative pressure is not available and the patient requires respiratory isolation, the patient wears a surgical mask to the department and while in the procedure room. The mask is changed when it becomes moist. Rooms where respiratory isolation patients are seen are left vacant for the appropriate time period. The room will be cleaned by housekeeping prior to the use of another patient. After the room has been vacated by the patient, housekeeping staff will be allowed to clean the room while wearing a mask. Refer to the TB Control Plan in the Infection Control B.I.T. for additional information.

III. ENVIRONMENTAL ASPECTS

- A. Sinks are not used for discarding any patient's secretions; a designated toilet is used. Staff must wear appropriate PPE when emptying containers.
- B. A suction machine is maintained in working order with a sterile suction catheter available. The suction catheter, tubing, and canister are discarded in contaminated trash box between patient uses.
- C. The emergency cart is available on first floor and ground floor of department.
- D. Humidifiers and nebulizers for oxygen therapy are not set up before use and are discarded after each patient use. Regulators must be wiped down with the hospital approved disinfectant between patients.

- E. Large portable oxygen tanks, cut off valve and connectors, will be cleaned with disinfectant after each patient use.
- F. Any spills of blood or body fluids are contained quickly. Environmental Services is contacted and the spill is cleaned as quickly as possible.

IV. PROCESSING OF EQUIPMENT

- A. Disposables: Disposable items are not reused or reprocessed.
- B. Reusable items: Reusable items such as vaginal speculums are sent to Central Service for cleaning and processing after each use. The items are placed in leak-proof containers and sent to Central Medical Supply for sterilization at the end of each day. Staff does not clean used items under any circumstances. Refer to IC Policy 7.1: Reuse of Disposable Items and Equipment.
- C. Marking Material
 - 1. Small individual containers of ~~Black-tattoo~~ Steri-Tatt ink are used and discarded after each patient usage. Individual vials of tattoo ink will be sterilized by CMS prior to use.
 - 2. Skin is cleaned if soiled before marking. ~~Marks-let~~ Marking pens are discarded after patient use if in contact with any body fluids.
- D. All positioning sponges will be covered in vinyl. Any sponges having tears or exposed porous material will be disposed of.
- E. Pre-fabricated bolus material may be used on intact skin if it is covered with plastic wrap between patients and wrap disposed of after use. Pre-fabricated bolus material will not be used on open wounds. Constructed bolus material must be made for patients with open wounds and disposed of after use.
- F. Aquaplast mask and tubing is one-patient use item. It is used repeatedly on one patient throughout the treatment course and then discarded. Large Aquaplast mask on shelf and small Aquaplast mask in cabinet will be covered with plastic bags when not in use.
- G. Clean laundry will be stored in a closed environment.
- H. One patient use items are used repeatedly on the same patient throughout the treatment course. When item becomes visibly contaminated, it is discarded.

- I. Hanging Vac-locs will be cleaned with hospital approved disinfectant before and after use.
- J. **Blue Bag System**
Blue Bags-Bags are cleaned daily after each treatment with hospital approved disinfectant.
Manifold cushions-Manifold cushions are to be disposed of after patient completes course of treatment. In the event one becomes contaminated during the treatment course, it will be disposed of and patient will be provided with a new one.
Storage- Between treatments, blue bags will be stored on a shelving cart, allowing only one blue bag per shelf.
Disposable components- Cover sheet and adhesive tape, Hygienic Drape Manifold Tube Cover, and Manifold Cushion. If Manifold Tube becomes soiled during treatment, it will be disposed of and patient will be provided with a new one.
- K. **Mammosite Procedures**
X-ray markers, Luer Source Guide Tubes, Length Gauges will be cleaned and disinfected with Gluteraldehyde (Cidex).
Patient Care Kits- Sterile Prepared kits which include all materials to clean mammosite site after each procedure.

V. ROUTINE CLEANING OF THE RADIATION ONCOLOGY DEPARMENT BY DEPARTMENT PERSONNEL

- A. Accelerator treatment couch will be cleaned after each patient use by wiping with the hospital approved disinfectant.
- B. Exam tables, other stationary equipment, and stretchers are wiped with the hospital approved disinfectant between patient uses.
- C. Aquaplast Water Bath Warmer: Sterile water is used to fill the tub to the appropriate level. The unit is routinely drained and cleaned weekly, unless contamination occurs, using a thin solution of Bon Ami and water with a low abrasion Scotch Brite pad. The temperature is maintained between 160° and 175°. The Temperature is checked weekly and recorded in a log.
- D. Sterile items should be grouped together. Clean items should be grouped separately. Sterile supplies are checked and rotated to ensure package integrity. At no time, are clean and dirty items stored together.

- E. General Infection Control practices will be maintained.

VI. ROUTINE CLEANING OF THE RADIATION ONCOLOGY DEPARTMENT BY HOUSEKEEPING STAFF.

- A. Daily routine cleaning and dusting of rooms and equipment with the hospital approved disinfectant.
- B. Overhead cables, swing arms, control boards, panels, light fixtures, bulbs and other electrical equipment are dusted daily.
- C. Shelves and other storage areas are cleaned weekly and as needed with the hospital approved disinfectant.
- D. Floors should be cleaned and mopped daily, or more often as needed.
- E. Floor buffers will not be used for routine cleaning; this equipment will only be used for floor finishing.
- F. Laundry bags will be emptied on a daily basis or when $\frac{3}{4}$ full.

A. DISPOSAL OF WASTE

- A. Needles and syringes are not recapped after use, but are discarded in Safety approved needle boxes. No other items are placed in needle boxes, i.e., gauze, Q-tips, etc.
- B. Medical waste boxes will be emptied daily by Environmental Services.

References:

LSUHSC IC 2.0 Hand Hygiene

LSUHSC Infection Control Bloodborne Pathogen, Isolation, Tuberculosis Control Plan (B.I.T.)

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