2.2 Burn Intensive Care Unit

Purpose
The burn wound is especially susceptible to microbial invasion because of loss of the protective integument and the presence of devitalized tissue. Reduction of the risk of infection is of utmost priority in caring for the burn patients. Prevention of cross contamination between patients and personnel is an important objective of the infection control program in the burn unit. A second objective is prevention of infections related to invasive procedures.

Audience
All employees of UTMB hospitals and clinics, contract workers, volunteers, and students who work with patients in the Burn Intensive Care Unit

Personnel
- All personnel shall be free of communicable diseases prior to entering the unit.
- Eating and drinking shall be confined to designated areas, such as the break room or nurses lounge.
- Strict hand hygiene shall be practiced before and after each patient contact with an appropriate antiseptic handwashing agent or an alcohol hand rub (see policy: Hand Hygiene for All Hospital Employees).
- Personnel shall comply with Employee Health Center guidelines for their area.
- Clean clothes shall be worn by all personnel providing direct patient care.
- All open cuts and lacerations sustained by healthcare workers shall be covered with a waterproof dressing.
- Aseptic technique shall be maintained for all dressing changes utilizing clean gloves, clean gown and a clean field. Post-operative dressings shall be removed using clean technique.
- Protective goggles and/or masks with splash guards shall be worn by all personnel when providing direct care for patients on mechanical ventilation, or with tracheostomies or during extensive wound care when copious secretions are present and/or splash is anticipated.
- After hand hygiene, clean gloves and gowns shall be donned prior to entering each patient’s room. Gloves and gowns shall be removed prior to leaving each room. Hand hygiene shall be performed immediately after removing gloves and after contact with any contaminated surface.
  - Burn surgeons, burn nurses and burn HTA’s must wear a gown
and gloves when entering a BICU room to have any contact with the patient or the patient’s environment.

- All other healthcare workers must wear a gown and gloves every time they enter a BICU room.

- Moisture barrier gowns shall be worn for extensive wound care at the bedside and during all hydrotherapy procedures.

- The following Healthcare Epidemiology Policies will be followed in addition to the directions for safe care of ICU patients set forth in this policy
  - 1.14 Hand Hygiene for all Healthcare Workers
  - 1.18 Intravascular Devices and Infusion Systems
  - 1.9 Isolation
  - 1.40 Prevention of Nosocomial Pneumonia
  - 1.45 Prevention of Urinary Tract Infection

- Oral Care

  - Keep oral swabs inside the baggie and do not allow them to have contact with the table or any other surface prior to placing them in the patient’s mouth.

- Tube insertion and feeding

  - Wash off the top of the can of enteral feeding before opening it.

  - Cover opened cans securely with a clean cover before refrigerating. (see policy 1.24 Preparation of Enteral Feedings [Adult and Pediatric]).

  - Use aseptic no-touch technique when measuring and placing the feeding tube.

- Respiratory Care

  - Small-volume medication nebulizers: In-line and hand-held nebulizers.

    - Between treatments on the same patient, remove the remaining medication from the cup, rinse with a saline bullet, and wipe the inside of the cup
thoroughly with an alcohol pad (first remove the plunger). Reattach to system and store for next use. The nebulizer must be changed every 24 hours.

- Use only sterile fluid for nebulization and dispense the fluid into the nebulizer aseptically.

- Whenever possible, use aerosolized medications in single-dose vials. If multidose medication vials are used, follow manufacturers’ instructions for handling, storing, and dispensing the medications.

  - Using an alcohol pledget, wipe the port and the top of the MDI vial prior to attaching to the tubing.
  - Suction Yankeur with warm water after suctioning patient.
  - Store Yankeur in a clean bag on a horizontal surface between uses.
  - Change Yankeur every 24 hours.
  - Disinfect the port with alcohol prior to attaching the cuffalator.
  - Disinfect the cuffalator with alcohol after each use; store in cuffalator box when not in use.
  - Wear clean gloves when working with the heat moisture exchanger, MDI or nebulizer.

- Cleaning Equipment
  - The ventilator must be cleaned daily by the respiratory therapist.
  - Upon discharge the ventilator will be thoroughly cleaned and tubing and circuit discarded.
  - Clinical Equipment service will clean the medical equipment in the room (the ventilator). The nurse will assure that all settings on the equipment are appropriate after each room is cleaned.

- Specimen Collection
- Gloves must be removed, hand hygiene accomplished and clean gloves donned before all blood draws and dressing changes and especially if the respiratory track has just been touched.

  - Hand Hygiene
    - Hand hygiene must be practiced (handwashing with an antimicrobial soap or application of an alcohol hand rub) prior to donning and after doffing gloves. Gloves must be removed followed by hand hygiene if hands have been contaminated with body fluids and a cleaner part of the body must be touched (i.e. working from clean to dirty).

- Standard Precautions shall be observed for all patients at all times. Personal protective barriers shall be readily available.

- Patients who require special precautions shall have a sign posted on the door.

- Soiled dressings that are saturated with blood or bloody body fluids shall be discarded into red biohazard bags.

- To prevent cross contamination, supplies such as dressings and topical agents shall be assigned to each patient. Supplies or topical medications assigned to one patient shall be labeled with the patient’s name and never be used on another patient.

- Topical medications will remain in the room until the patient no longer needs them or is discharged.

- When transporting a patient, a clean sheet shall be placed on the stretcher or wheelchair under the patient and another one shall be used to cover the patient.

- Patient isolation shall continue throughout the transport period. The transport equipment shall be cleaned with a disinfectant solution after use by each patient.

**Visitors**

- Visitors may not be admitted to the BICU if they have any signs or symptoms of infection.

- Visitors shall don clean gowns, gloves and masks (if indicated) for each patient visit and shall practice hand hygiene before and after patient contact.

- If the patient is in isolation, visitors shall abide by the established infection control guidelines.

**Equipment**

- Disposable equipment shall be used whenever possible.
- Stretchers and wheelchairs shall be cleaned with an EPA-registered hospital-grade disinfectant between patient uses and immediately when grossly soiled.
- Resuscitation bags shall be disposable and assigned to each patient.
- Stethoscopes shall be assigned to each patient. They shall be cleaned with an approved disinfectant between patients or after soiling.
- Non-disposable instruments shall be returned to Sterile Processing.
- Re-usable equipment must be cleaned with an EPA-registered hospital-grade disinfectant after each patient use.
- Clean and sterile supplies shall be stored on shelves or pallets 8-10” off the floor. Clean and sterile supplies shall be dust free.
- Smaller pieces of equipment that are reusable shall be transported for reprocessing to Sterile Processing.

Environmental Services (Housekeeping)

- All housekeepers shall follow the Standard Precautions Policy. Gloves and gowns shall be worn for all routine cleaning.
- When entering the rooms of patients on isolation, housekeepers shall follow the directions posted on the door (i.e. N-95 masks for Airborne Precautions).
- All environmental surfaces in patients' rooms shall be wiped daily with an EPA-registered hospital-grade disinfectant. Surfaces shall be spot cleaned as needed.
- Cleaning cloths shall be changed frequently to maintain effective cleaning.
- Walls shall be spot cleaned when they are soiled. Routine cleaning of the walls is not necessary.
- Curtains shall be changed when they are soiled. Routine changing of curtains is not necessary.
- Floors shall be mopped daily with a hospital-grade disinfectant. The disinfectant solution in the bucket shall be changed every two rooms. At no time shall sodium hypochlorite or other disinfectants be combined with the routine disinfectant used for the floors.
- When the patient is discharged, the room shall be thoroughly cleaned. The bed, along with other surfaces, shall be wiped down with an EPA-registered hospital-grade disinfectant. The surfaces of unused patient care supplies shall be wiped with an EPA-registered hospital-grade disinfectant. Any supplies whose surface cannot be
wiped down shall be discarded. The floors need only be mopped with a hospital-grade disinfectant.

- After patients are discharged, mattress covers shall be checked for holes, cracks, or tears. Mattresses without intact covers shall not be used for subsequent patients.

- No plants, flowers, or fruit baskets shall be brought into the burn unit or patient rooms.

- Perishable food items (except for raw fruits and vegetables or unpasteurized dairy products) shall be brought in by family members in small quantities that can be consumed within 24 hours. Food items shall be stored in the nourishment refrigerator. These items shall be labeled with the patient's name, date, and time and shall be discarded after 24 hours.

Fruits and Flowers

- Personnel shall follow the burn unit general infection control policy during hydrotherapy procedures.

- Moisture barrier gowns shall be worn for all dressing changes and treatment in the hydrotherapy room.

- A clean isolation or plastic gown shall be worn for each patient. All persons having direct contact shall wear clean gowns and gloves. Clean gloves shall be worn to apply topical agents.

- Barrier attire shall be worn during the following hydrotherapy practices:

<table>
<thead>
<tr>
<th>Practice</th>
<th>Barrier Attire</th>
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<tbody>
<tr>
<td>a. Debriding wounds while patient on stretcher</td>
<td>Gowns and Gloves</td>
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<tr>
<td>b. Administering pain medications</td>
<td>Gloves</td>
</tr>
<tr>
<td>c. Tubbing patient</td>
<td>Impermeable gown, impermeable sleeves, gloves</td>
</tr>
<tr>
<td>d. Transporting patient to and from room</td>
<td>Same barrier attire to be used in hydrotherapy (gowns, gloves)</td>
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<tr>
<td>e. Walking through unit, not touching environment or patient</td>
<td>No barriers required</td>
</tr>
<tr>
<td>f. Entering unit and examining wounds of patient</td>
<td>Gowns and Gloves</td>
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• Barrier precautions will be used for all hydrotherapy treatments. Impermeable gowns will be worn for cases in which it is predictable that the healthcare worker will get wet. Impermeable sleeves will be worn if the healthcare worker must submerge his/her hands and arms into the water.

• Booties, caps, masks and eye shields are worn as necessary for Standard Precautions

• All equipment (transporter and tank) shall be cleaned and disinfected after each use following the protocol recommended by the manufacturer. The transporter cushions shall be taken off the frame, washed, and wiped with a disinfectant. The covers of the transporter cushions shall be checked for holes, cracks or tears after each use, and those without intact covers shall be discarded. The frame shall be washed and wiped with a disinfectant, and then the cushions and the frame shall be wiped dry with a clean towel.

• Sterile scissors and forceps shall be used for each patient’s dressing change.

• All patient supplies shall be labeled with the patient’s name, kept separate in a plastic ziplock bag, and used only on that patient. After each use, the outside of jars containing creams or ointments shall be wiped clean.

• Patients shall be dressed in a clean hospital gown after clean dressings have been applied, when appropriate.

• The water temperature shall be maintained at 98° to 102° Fahrenheit, unless otherwise prescribed.

• Sodium hypochlorite, if ordered, shall be added to the water in the following amount: 0.5 gallons to 200 gallons.

• Each tank and shower table shall be lined with a new liner for each patient. Clean liners shall be left in tanks overnight, only after the tanks have been disinfected and dried with a towel.

• A clean scissors will be used to poke air holes into the tub liners.

• Wheelchairs shall remain in the hydrotherapy area, and not be placed in public areas.

• Any equipment, which becomes contaminated with the patient’s blood, other body fluids or excretions, shall be disinfected prior to reuse.