OPERATING ROOM ORIENTATION

Goals & Objectives

- Discuss the principles of aseptic technique
- Demonstrate surgical scrub, gowning, and gloving
- Identify hazards in the surgical setting
- Identify the role of the scrub person, circulating nurse, and medical student
- Discuss ways the JMS can participate in the care of the patient and thereby become an active, useful member of the surgical team

Lockers

- Lockers are available for your use while you are in the operating room.
- You must bring your own lock.

DRESS CODE - SURGICAL ATTIRE

1. All persons who enter the semirestricted and restricted areas of the surgical suite should be in hospital laundered surgical attire intended for use only within the surgical suite.
2. All possible head and facial hair, including sideburns and neckline, should be covered when in the surgical suite.
3. All persons entering an operating room or centerwell area should wear a mask.
4. All personnel entering the suite should have all jewelry confined or removed. Watches and plain wedding bands are acceptable. Earrings must be covered by the scrub cap.
5. Nail polish and artificial nails should not be worn within the suite.
6. Protective barriers (gloves, masks, protective eyewear, and face shields) are provided by the hospital and should be utilized to reduce the risk of exposure to potentially infective agents.
7. Shoes should be dedicated to the OR and shoe covers are not required. If shoe covers are necessary, the wearer should remove them before leaving the operating room to avoid tracking blood and debris through the department.
SURGICAL HAND SCRUB

1. A five (5) minute anatomical timed scrub will be used for all surgical hand scrubs.
2. Fingernails must be free of polish/enamel and of medium length. No jewelry is permitted on the hands and arms while performing as a member of the surgical team.
3. **Remember to put your mask on prior to starting you scrub.**
4. Wash hands and arms with solution to 2 inches above the elbow.
6. Start scrubbing fingers of left hand, one at a time, treating each finger as four-sided; palm, knuckles, and back of hand. Repeat with right hand.
7. Scrub right wrist and continue up arm to 2 inches above elbow. Repeat with left arm. Discard brush. Rinse both hands and arms under running water keeping hands above level of elbow so that water runs off the elbows and not the hands.
**Gloving Procedure - Open**

1. Avoid contact of sterile gloves with ungloved hands during closed-glove procedure.
2. For closed-glove method, never let the fingers extend beyond the stockinette cuff during the procedure. Contact with ungloved fingers constitutes contamination of the glove.
3. For open-glove method, touch only the cuff of the glove with ungloved hand, and then only glove to glove for other hand.
4. If contamination occurs during either procedure, both gown and gloves must be discarded and new gown and gloves must be added.
5. When removing gloves after a procedure is finished, the gloves are removed after the gown is removed inside out, using glove-to-glove, then skin-to-skin technique.
Gloving Procedure - Closed
Points to Remember about Aseptic Technique

Adherence to the Principles of Aseptic Technique Reflects One’s Surgical Conscience.

1. The patient is the center of the sterile field.

2. Only sterile items are used within the sterile field.
   A. Examples of items used.
   B. How do we know they are sterile? (Wrapping, label, storage)

3. Sterile persons are gowned and gloved.
   A. Keep hands at waist level and in sight at all times.
   B. Keep hands away from the face.
   C. Never fold hands under arms.
   D. Gowns are considered sterile in front from chest to level of sterile field, and the sleeves from above the elbow to cuffs. Gloves are sterile.
   E. Sit only if sitting for entire procedure.

4. Tables are sterile only at table level.
   A. Anything over the edge is considered unsterile, such as a suture or the table drape.
   B. Use non-perforating device to secure tubing and cords to prevent them from sliding to the floor.

5. Sterile persons touch only sterile items or areas; unsterile persons touch only unsterile items or areas.
   A. Sterile team members maintain contact with sterile field by wearing gloves and gowns.
   B. Supplies are brought to sterile team members by the circulator, who opens wrappers on sterile packages. The circulator ensures a sterile transfer to the sterile field. Only sterile items touch sterile surfaces.

6. Unsterile persons avoid reaching over sterile field; sterile persons avoid leaning over unsterile area.
   A. Scrub person sets basins to be filled at edge of table to fill them.
   B. Circulator pours with lip only over basin edge.
   C. Scrub person drapes an unsterile table toward self first to avoid leaning over an unsterile area. Cuff drapes over gloved hands.
   D. Scrub person stands back from the unsterile table when draping it to avoid leaning over an unsterile area.
7. **Edges of anything that encloses sterile contents are considered unsterile.**
   A. When opening sterile packages, open away from you first. Secure flaps so they do not dangle.
   B. The wrapper is considered sterile to within one inch of the wrapper.
   C. In peel-open packages, the edges where glued, are not considered sterile.

8. **Sterile field is created as close as possible to time of use.**
   A. Covering sterile tables is not recommended.

9. **Sterile areas are continuously kept in view.**
   A. Sterility cannot be ensured without direct observation. An unguarded sterile field should be considered contaminated.

10. **Sterile persons keep well within sterile area.**
    A. Sterile persons pass each other back to back or front to front.
    B. Sterile person faces a sterile area to pass it.
    C. Sterile persons stay within the sterile field. They do not walk around or go outside the room.
    D. Movement is kept to a minimum to avoid contamination of sterile items or persons.

11. **Unsterile persons avoid sterile areas.**
    A. Unsterile persons maintain a distance of at least 1 foot from the sterile field.
    B. Unsterile persons face and observe a sterile area when passing it to be sure they do not touch it.
    C. Unsterile persons never walk between two sterile fields.
    D. Circulator restricts to a minimum all activity near the sterile field.

12. **Destruction of integrity of microbial barriers results in contamination.**
    A. Strike through is the soaking through of barrier from sterile to non-sterile or vice versa.
    B. Sterility is event related.

13. **Microorganisms must be kept to irreducible minimum.**
    A. Perfect asepsis is an idea. All microorganisms cannot be eliminated. Skin cannot be sterilized.
    Air is contaminated by droplets.
HAZARDS IN THE SURGICAL SUITE

Electrical
Cautery Units, Defibrillators, OR Beds, numerous pieces of equipment
All equipment must be checked for electrical safety before use!!

Anesthetic Waste

Radiation
Leaded aprons and shields available for use during procedures.

Laser Safety
Protective eyewear for patient and operating team.
Doors remain closed with sign - "Danger, Laser in Use."
Sterile water available in the room and on sterile field.
Smoke evacuation system is to be employed when applicable.
Surgery high filtration masks should be worn during procedures that produce a plume.

General Safety
Apply good body mechanics at all times when transferring patients.
Operating room beds and gurneys will be locked before patient transfer.
Operating safety belts will be used for all patients.
Never disconnect or connect electrical equipment with wet or moist hands.
Discard all needles, razors, scalpel blades and broken glass into special identified containers.

UNIVERSAL PRECAUTIONS SUMMARY

Although the risk of contracting HIV in the healthcare setting is extremely low, there are other bloodborne pathogens which pose a much more significant risk. Precautions should be followed to reduce the risk of exposure to bloodborne pathogens. Each healthcare worker should assess their possible risks and take precautions to reduce these risks. Universal Precautions are designed to protect healthcare workers from occupational exposure and should be followed when potential for exposure might occur.

Universal blood and/or body fluid precautions should be consistently used for ALL patients. Fundamental to the concept of Universal Precautions is treating all blood and/or body fluids as if they were infected with bloodborne pathogens and taking appropriate protective measures, including the following:

1) Gloves should be worn for touching blood and/or body fluids, mucous membranes, non-intact skin, or items/surfaces soiled with blood and/or body fluids. Gloves should be changed after contact with each patient and hands washed after glove removal. Though gloves reduce the incidence of contamination, they cannot prevent penetrating injuries from needles and other sharp instruments.
2) Gowns or aprons should be worn during procedures that are likely to generate splashes of blood and/or body fluids onto clothing or exposed skin.

3) Masks and protective eyewear should be worn during procedures that are likely to generate droplets of blood and/or body fluids into the mucous membranes of the mouth, nose, or eyes.

4) Needles and sharps should be placed directly into a puncture-resistant leakproof container which should be as close as possible to the point of use. Needles should not be recapped, bent, broken, or manipulated by hand.

5) Hands and skin surfaces should be washed after contact with blood and/or body fluids, after removing gloves, and between patient contact.

6) Gloves should be worn to cleanup blood spills. Blood spills should be wiped up and then an EPA registered tuberculocidal disinfectant applied to the area. The disinfectant should have a one minute contact time and the area rinsed with tap water. If glass is involved, wear double gloves or heavy gloves. Pick up the glass with broom and dust pan, tongs, or a mechanical device.

7) Healthcare workers with exudative lesions or weeping dermatitis should not perform direct patient care until the condition resolves.

8) Disposable resuscitation devices should be used in an emergency.

9) Occupational Exposures: Definition
   - Puncture wounds
   - Needlesticks/Cuts
   - Splashes into the eyes, mouth, or nose
   - Contamination of an open wound

10) Occupational Exposures:
    - Wash the area immediately with soap and water
    - If splashed in the eyes mouth or nose have them properly flooded or irrigated with water
    - Notify supervisor as soon as possible