

- Never move a patient from one area to another while a flammable anesthetic is being administered.
- Properly ground a patient before using an electrosurgical unit.
- Always check electrical cords and wires for fraying and breakage before using.
- Never use a piece of electrical equipment without having been taught the proper procedure for using it.
- If equipment appears damaged or malfunctioning, immediately discontinue its use, red tag it, and send it for repair.
- Avoid unnecessary motion around the patient's head and the anesthesia machine.
- ✓ **NOTE:** The most explosive area in the operating room is the area in the 2-foot radius around the patient's face mask.
- Turn off all electrical equipment as soon as it is no longer needed.

2. Environmental safeguards

- Use air conditioning with controlled humidity in all operating rooms to reduce explosion hazards, provide comfort for the patient and personnel, and help control airborne bacteria.
- Keep the operating room temperature range between 60°F–80°F with the average about 70°F.
- Keep the operating room humidity between 55%–60% to minimize static electricity build-up in the presence of flammable anesthetic agents.
- Ensure that air-conditioning units function properly and that air intakes and exhausts have been installed in the proper places to provide proper ventilation and filtration.
- ✓ **NOTE:** The farther apart the better to aid in preventing pockets of gas in the room.
- Ensure that **positive static pressure** is used in the operating room.
- ✓ **NOTE:** **Laminar air flow** reduces the number of organisms to 0–1 per cubic foot and provides the almost microbial-free air environment so necessary in high-risk procedures.
- Keep the operating room doors closed in order to maintain a positive static pressure.
- Make sure that the operating room furniture is made of metal or conductive rubber.
- Use only cotton blankets or sheets in the operating room because wool, silk, nylon, and synthetic materials have high static potential.