Don't Fuel the Fire

HUNDREDS OF FIRES occur in U.S. operating rooms each year, caused by activating ignition sources in alcohol vapor- or oxygen-enriched environments.

- 1. Ask if flammable materials, oxidizers and potential fire ignition sources will be used for the procedure.
- 2. Learn how to safely use these items together.
- 3. Know what actions to take if a fire does occur.

The 'fire triangle' shows the three elements needed to start a fire (oxygen + fuel + ignition source) and who is responsible for managing them.

- Learn to recognize early signs of fire.
- Have CO₂ fire extinguishers and saline or water solution available.
- Participate in OR team fire drills.

Nurse Linens, Supplies, Patient,

Cable Connections Fiber Optic Lights Electrocautery Electrosurgery Lasers

Alcohol Preps, Surgical Drapes

Wait for Preps to Evaporate and O₂ to Dissipate

Nitrous Oxide

Oxygen

Properly apply alcohol-based prepping solutions and let them dry. ChloraPrep[®] and DuraPrep[®] are both nearly 75% isopropyl alcohol which is highly flammable. Wait at least three minutes for alcohol to evaporate from hairless skin and up to one hour from hair before using ignition devices. Apply drapes only after preps have *dried*. Don't use too big an applicator for too small an area (see diagram). Don't let alcohol pool in skin creases. Remove alcohol-soaked materials.

Wait for oxygen to dissipate from under drapes, and flush with room air or scavenge away before using ignition devices. Use as **diluted** a concentration of oxygen as possible. Stop supplemental oxygen at least one minute before using igniton devices. Inform the surgeon before increasing oxygen concentration.







