

OPERATING ROOM FIRE SAFETY STANDARDS MANUAL

DEPARTMENT OF ORIGIN:	ORIGINATION DATE:
POLICY/PROCEDURE #:	REVISED DATE:
AREAS AFFECTED:	REVIEWED DATE:
PERFORMED BY:	APPROVED BY: Signature on file _____ Director, Surgical Services
SUBJECT: Fire Safety in the Operating Room	

Purpose: To Ensure Fire Safety in the Operating Room

Definitions: All personnel providing care for the patient will be knowledgeable and competent of the Fire Safety practices including communication between team-members, risk reduction measures and fire response actions.

General Guidelines:

- A. Communication between team members regarding fire risks in the Operating Room will be consistently practiced. Essential information regarding ignition sources, fuels and oxidizers and oxygen enriched environments will be transmitted. Essential communication between the following team members is required:
1. Surgical Technician and Circulating Nurse
 2. Nurse and Anesthesia Provider
 3. Nurse and Surgeon
 4. Tech and Surgeon
 5. Surgeon and Anesthesia Provider

Examples of essential information to be communicated include but are not limited to:

1. Location of ignition sources such as cautery pencils, light cables, laser arms/fibers, electrified endoscopic instruments, high speed burrs and defibrillators.
2. Percentage of oxygen concentrations being used, use of nitrous oxide, airway leaks and pressures and use of cuffs of endotracheal tubes.
3. Standby vs On Mode for lasers, assurance of electrical connections, and use of cautery around the trachea/supplemental oxygen.

Department of Origin:	Areas Affected:
Subject: Fire Safety in the Operating Room	Page 2 of 3

- B. Risk reduction measures are based upon control of a leg of the fire triangle. As Nurses and Techs are in control of the fuel sources and at times ignition sources, the risk reduction measures to be practiced include but are not limited to:
1. Prevention of pooling of liquid preps.
 2. Allowing preps to dry.
 3. Have water or saline available on the sterile field.
 4. Use wet sponges as appropriate.
 5. Place electrosurgical electrodes in a holster or another location off the patient when not in active use.
 6. Clean cautery tip frequently.
 7. Complete all cable connections before activating light source.
 8. Place laser in STANDBY mode when not in use.
 9. Cover exposed body hair.

Risk reduction measures for Anesthesia Providers are based upon control of oxidizers and oxygen enriched environments. Risk reduction behaviors include but are not limited to the following:

10. Control/question the use of high concentrations of oxygen.
11. Minimize oxygen and nitrous oxide buildup beneath drapes.
12. Use laser safe ET tubes when laser is used in the airway.
13. Monitor and control airway leaks.

- C. Fire response actions are based upon control of a leg of the fire triangle. Fire response actions for Nurses and Techs include but are not limited to:
1. Pat out fire with towel or gloved hand.
 2. Flood area with water or saline.
 3. Remove burning fuel sources from the patient.
 4. Extinguish burning fuel sources from the patient.
 5. Call for assistance.
 6. Maintain sterile field as possible.
 7. Save all involved supplies/equipment.
 8. Evacuate as necessary.
 9. Report the incident.

Fire response actions for Anesthesia Providers include but are not limited to:

10. Stop the flow of oxidizers.
11. Disconnect breathing circuit.
12. Consider airway lavage.
13. CRNA informs staff MDA immediately of the incident.
14. Restore breathing with air until all possible sources of fire or re-ignition are suppressed.
15. Assess for diagnostics including blood gas, chest x-ray or other labs.

Department of Origin:	Areas Affected:
Subject: Fire Safety in the Operating Room	Page 3 of 3

- D. Evacuation of the patient from the Operating Room due to fire requires:
1. A clear evacuation route to the designated receiving area.
 2. Oxygen, ventilation devices, and medications needed for transport.
 3. Notification of the receiving area.
 4. Maintenance of sterility of open wounds in transport.
 5. Obtaining ample personnel to transport the patient.
 6. Notification of supervisory/management staff, in-house firefighting resources and city-wide firefighting resources.

Sample form developed by Anesthesia Services Medical Group of Topeka and distributed with permission by PPM.