

## Surgical Fire Risk Assessment Protocol

Alcohol-based prep solution dried for >5 minutes. No pooling observed. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA		
(Circle appropriate option)	<b>Y</b>	<b>N</b>
* Surgical site or incision above the xiphoid, or involving airway or pulmonary components	1	0
* Open oxygen source, >40% oxygen (supplemental oxygen via face mask or nasal cannula) potential airway leak, proximity of ETT, double-lumen tube	1	0
* Available ignition source: i.e. monopolar electrosurgery unit, laser, fiberoptic light source	1	0
<b>Total score</b>		
Scoring: 3 = High risk 2 = Low risk w/potential to convert to high risk 1 = Low risk		
<input type="checkbox"/> High Risk Fire Protocol initiated by: Anesthesia provider    Surgeon    RN    Scrub tech (circle one)		

### **Fire Risk Protocols:**

#### **Score 3 = High Risk**

The circulating nurse, surgeon and anesthesia providers take these precautions and communicate at handoff:

#### **Circulating nurse:**

- Write "Fire Risk High" on dry erase board and fill out the Red Fire Triangle.
- Ensures appropriate draping techniques to minimize oxygen
- Suction by O<sub>2</sub> prongs to "scavenge" O<sub>2</sub>
- Provides sterile carbon dioxide flush line with filter to surgical tech. Ensures at least 5 liters/minute of carbon dioxide flush.
- Maximizes the perimeter around the incision point.
- Confirms verbally the heat source setting.
- Assesses that enough time has been allowed for fumes of alcohol-based prep solutions to dissipate (minimum of 3 min)
- Use of saline-dampened sponges
- Basin of sterile saline and bulb syringe are available for fire suppression
- Places laser in "standby" mode when not in use. Secures laser foot pedal to prevent accidental activation

#### **Anesthesia provider:**

- Notifies the surgeon and documents if O<sub>2</sub> concentration >40% or risk of air leak present
- Before an ignition source is activated:
  - o Reduce the oxygen concentration to 40% or less if possible
  - o Stop the use of nitrous oxide
  - o Check for appropriate use of carbon dioxide flush system.

#### **Surgical Tech:**

- Water or saline available for the surgical field.
- Wet sponges
- Suction always available on field
- ESU in holster when not in use; light source turned off when not in use
- Positions sterile carbon dioxide flush line with filter in surgical field. Ensures at least 5 liters/minute of carbon dioxide flush.

#### **Surgeon:**

- Before an ignition source is activated:
  - o Wet sponges used as barrier between ESU and oxygen source
  - o Announces the initial intent to use an ignition source
  - o Verifies that the anesthesia provider has reduced the O<sub>2</sub> concentration to the minimum acceptable level for 1-3 min before using ignition source.
  - o Confirm verbally the heat source setting – minimize ESU setting if possible
  - o Positions sterile carbon dioxide flush line with filter in surgical field. Ensures at least 5 liters/minute of carbon dioxide flush.

#### **In Case of Fire:**

- 1) Shout "Fire"
- 2) Remove ETT (if airway fire)
- 3) Turn off O<sub>2</sub>
- 4) Throw saline on field