Operating Room Fire Algorithm
(Adapted from the ASA Practice Advisory for the Prevention and Management of Operating Room Fires, 2007)

**Fire Prevention:**
- Avoid using ignition sources in proximity to an oxidizer-enriched atmosphere
- Configure surgical drapes to minimize the accumulation of oxidizers
- Allow sufficient drying time for flammable skin prepping solutions
- Moisten sponges and gauze when used in proximity to ignition sources

**Fire Prevention:**
- Agree on a team plan and team roles for preventing and managing a fire
- Notify the surgeon of the presence of, or an increase in, an oxidizer-enriched atmosphere
- Use cuffed endotracheal tubes for surgery in airway; appropriately prepare laser-resistant endotracheal tubes
- Consider an endotracheal tube or laryngeal mask for monitored anesthesia care (MAC) with moderate to deep sedation and/or oxygen-dependent patients who undergo surgery of the head, neck or face
- Before an ignition source is activated:
  - Announce the intent to use an ignition source
  - Reduce the oxygen concentration to the minimum required to avoid hypoxia
  - Stop the use of nitrous oxide

**Fire Management:**

**Early Warning Signs of Fire**

**Halt Procedure**

**Initiate R.A.C.E.**
- Rescue patient; sound Alarm 5-2147*
- Contain smoke/fire; Extinguish the fire

If fire not extinguished on first attempt use de-ionized water fire extinguisher
*If the fire is out of control, the patient is engulfed in flames and all attempts to control the fire have failed, then the OR team MUST evacuate the room for their own safety.

**AIRWAY FIRE**
IMMEDIATELY, without waiting
- Disconnect and remove tracheal tube or LMA
- Stop the flow of all airway gases
- Remove sponges/burning material from airway
- Pour saline into airway

**NON AIRWAY FIRE**
IMMEDIATELY, without waiting
- Stop the flow of all airway gases
- Remove drapes, if unable to remove drapes: pour saline/smother technique to extinguish fire
- Remove drapes, search for additional flames

- Reestablish ventilation
- Avoid oxidizer-enriched atmosphere if clinically appropriate
- Examine tracheal tube to see if fragments may be left behind
- Consider bronchoscopy

- Maintain ventilation
- Assess for inhalation injury if patient not intubated

Assess patient status and devise plan for management

*West Hartford Surgery Center dial 911*