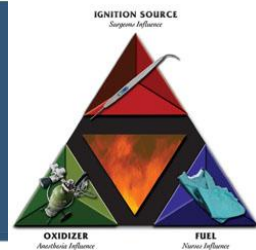


2017 AORN Fire Safety Tool Kit

Fire: Team Responsibilities in the Perioperative Practice Setting



Goal

The goal of this learning activity is to educate perioperative team members about their roles if a fire occurs in the perioperative practice setting.

Objectives

After completing this activity, the participant will be able to:

1. Discuss the roles of the perioperative team members during small fires.
2. State roles of the perioperative team members during large fires.
3. Identify two actions that each perioperative team member should take during a fire in the perioperative setting.

Topics

- Fire facts
- Locations
- Patient injuries
- Fire reports by procedure
- High-risk procedures
- Fire safety is a team effort

Fire Facts

- Estimated Frequency
 - 200 to 240 per year in the United States
 - 44% head, neck, or upper chest
 - 26% elsewhere on the patient
 - 21% in the airway
 - 8% elsewhere in the patient

Surgical Fires Can Occur: **ANYWHERE**

- Ambulatory surgery centers
- Hospitals
- Physicians' offices

Patient Injuries

- Of the 200 to 240 OR fires per year in the United States,
 - 20 to 30 are serious and result in disfiguring or disabling injuries.
 - 1 to 2 are fatal.

Surgical Fires

Reported by Procedure

- Cervical conization
- Cesarean delivery
- Facial surgery
- Infant surgeries (eg, patent ductus arteriosus)
- Oral surgery
- Pneumonectomy
- Tonsillectomy
- Tracheotomy

High-Risk Procedures

- Surgical procedures performed above the xiphoid process and in the oropharynx carry the greatest risk
 - Lesion removal on the head, neck, or face
 - Tonsillectomy
 - Tracheostomy
 - Burr hole surgery
 - Removal of laryngeal papillomas

Fire Prevention is a Team Effort

- Nurses
- Surgical technologists
- Surgeons
- Assistants
- Environmental Services associates
- Administration team members
- Everyone else not mentioned

Team Responsibilities in a Fire

- Depends on:
 - Facility
 - Time
 - Personnel present
 - Size of the fire
 - Location of the fire

Facility

- Office based
- Small ambulatory surgery center
- Large ambulatory surgery center
- Small hospital
- Large hospital
- Teaching hospital
- University medical center

Time

- Normal business hours
- Evenings
- Weekends
- On-call hours

Personnel Present

- RN circulator
- Scrub person
- Anesthesia professional in the room
- Surgeon
- Supervising anesthesia professional
- Anesthesia assistant
- First assistant (eg, RNFA, surgical assistant)
- Charge RN
- Support personnel
- Administrator

Size and Location of Fire

- Small fire on the patient
- Large fire on the patient
- Fire in the patient
- Airway fire
- Equipment fire

Responsibilities - All Fires

- Alert team members to the presence of a fire.
- Stop the flow of breathing gases to the patient.
- Extinguish the fire by smothering or using water or saline.
- Push the back table away from the sterile field.
- Remove burning material from the patient.
- Assess for secondary fires.
- Assess the patient for injuries.

Responsibilities - All Fires

- Notify appropriate personnel.
- Assign a liaison to the families.
- Act as a liaison to the families.
- Complete an occurrence report.
- Gather involved materials and supplies.

Responsibilities - Large Fire on the Patient

- Perform the responsibilities for All Fires.
- Activate the alarm system.
- Turn off the oxygen shut-off valve outside of the room.
- Extinguish any burning material off of the patient.
- Communicate with personnel in the surrounding areas about the presence of fire.
- Delegate responsibilities for non-direct caregivers.
- Assign a traffic director.
- Show the fire response team or fire department personnel to the location.

Responsibilities - Large Fire on the Patient

- Assist with the decision to evacuate.
- Order the evacuation of perioperative areas.
- Communicate the need to evacuate with personnel in surrounding areas.
- Order evacuation of the unit.
- Compile a list of all people in the perioperative areas.
- Activate the disaster/emergency preparedness plan.

Responsibilities - Airway or ET Tube Fire

- Perform the responsibilities for All Fires.
- Disconnect and remove the breathing circuit.
- Discontinue the flow of breathing gases to the patient.
- Remove the ET tube and any segments of the burned tube that remain in the airway.
- Pour water or saline into the airway as directed.
- Examine the airway.
- Re-establish the airway.

Responsibilities - Equipment Fire

- Perform the responsibilities for All Fires.
- Disconnect the equipment from the electrical outlet.
- Remove the working end of the equipment from the sterile field.
- Shut off the electricity to the equipment if you are unable to remove the plug from the outlet.
- Shut off gases to the equipment.
- Assess the size of the fire.
- Determine if equipment can be safely removed from the OR.
- Determine if personnel should evacuate the OR.
- Extinguish the fire using an extinguisher, if appropriate.

Responsibilities - Fire Department

- Internal fire brigade
 - Responsibility varies with location.
- External fire department
 - Should be notified of every perioperative fire.
 - Follow the facility policy and procedures.

Contacting the Fire Department

- Authority having jurisdiction
 - May assist with perioperative education programs
 - Determines types of fire extinguishers
 - Determines location, storage, and amounts of alcohol-based hand scrubs

Summary

Steps for surgical fire prevention:

1. Know your role in your facility.
2. Know all the roles in your facility.

The End