FIRE SAFETY IN THE HEALTHCARE SETTING

Fire safety and prevention is your responsibility. Fire safety is a set of practices intended to reduce the probability of fires occurring, as well as reducing the destruction caused by a fire. These measures include prevention of fire ignition and limiting the effects of the fire after it starts. A fire hazard is anything that increases the risk of a fire starting and anything that would prevent your safe escape once a fire starts.

COMPONENTS OF THE FIRE TRIANGLE

Three elements combine to cause fires:

- fuel
- a source of ignition/energy/heat
- oxygen

Eliminating even one of these elements will reduce the fire hazard. You must have all three in place for a fire to start.

COMMON SOURCES OF FUEL IN HEALTHCARE SETTING

- Oxygen
- Gowns
- Head coverings
- Gloves
- Towels
- Sponges
- Suction tubing
- Endotracheal tubes
- Alcohol-based skin preparations
- Patients’ GI tract gases
- Drapes
- Shoe covers
- Masks
- Linen
- Gauze dressings
- Adhesive tape
- Breathing circuits
- Tissue fixatives

COMMON SOURCES OF IGNITION IN THE HEALTHCARE SETTING

- Electrosurgical units
- Lasers
- Fiber optic cables/lights
- Argon beam coagulator
- Power tools (e.g. drills, burrs)
- Electrical equipment

COMMON OXIDIZERS IN THE HEALTHCARE SETTING

- Oxygen
- Oxygen enriched environment
- Nitrous oxide

COMMON FIRE HAZARDS TO WATCH FOR IN THE HEALTHCARE SETTING

- Missing or broken fire safety equipment
- Burned our EXIT lights
- Accumulated trash
- Open fire doors
- Blocked stairways and doors
COMMON FIRE HAZARDS OUTSIDE THE HEALTHCARE FACILITY

*Unattended cooking appliances  *Batteries
*Overloaded electrical systems  *Chimneys
*Faulty wiring  *Household appliances
*Candles  *Equipment that generates heat
*Fireplaces  *Smoking
*Fireworks  *Lanterns
*Grilling  *Lightning
*Insufficient or inappropriate combustible liquid storage

BECOME FAMILIAR WITH YOUR FACILITY’S FIRE AND SAFETY SYSTEMS

Know the location and use of:
- Manual pull alarms
- Smoke detectors
- EXIT doors and stairwells
- Sprinklers
- Fire extinguishers
- Fire doors

FIRE CLASSIFICATIONS

Class A: paper, cloth, wood, rubber and some plastics (e.g. combustible materials)
You should extinguish Class A fires with WATER.

Class B: Vapor present in flammable liquids, petroleum products, many oils, alcohol, and other combustible liquids or solvents
You should extinguish Class B fires with FOAM OR CARBON DIOXIDE

Class C: Energized electrical equipment
You should extinguish Class C fires with CARBON DIOXIDE

The most common fire extinguishers you will encounter are marked with A, B, or C to indicate the type of fire that it can extinguish. Some fire extinguishers (ABC) are labeled to be used for all three types of fires. There are other types of extinguishers but they are usually found in specific industry locations and are not commonly encountered in the healthcare environment.

WHEN TO FIGHT A FIRE

- If the fire is small
- If the fire is confined to immediate area
- If you are trained to use an extinguisher and can operate one effectively
- When you can use the correct extinguisher for the fire type
- When you DO NOT place yourself in danger
- When you can have your back to a safe escape route
- Protect yourself at all times—Stay low & avoid breathing heated smoke and fumes, or extinguishing agents

If the fire spreads or threatens your safe escape, LEAVE IMMEDIATELY!
When you are involved in an actual fire situation, you need to know two important acronyms: RACE and PASS. These two acronyms will assist you in effectively alerting those around you and using the fire extinguisher, if you find it necessary to fight the fire yourself.

**RACE**
- R = Rescue
- A = Activate the Alarm (“CODE RED” in a healthcare facility)
- C = Contain the fire
- E = Extinguish the fire or Evacuate

**PASS**
- P = Pull the pin at the top of the extinguisher
- A = Aim the nozzle at the base of the flames
- S = Squeeze the handle
- S = Sweep from side to side at the base of the fire until the fire is extinguished

**FIRE SAFETY EQUIPMENT**

All homes, offices and healthcare facilities should have functioning fire detection equipment. Common fire detection equipment includes:

- Sprinklers which are activated by heat and must be unobstructed. Nothing can be stored above 18” from the ceiling or sprinkler head.
- Smoke Detectors which sound alarms. In healthcare facilities, they should be checked at least once a month for proper functioning. In the home, they should be checked at least twice a year. Generally, people do this at the beginning and end of daylight savings time as a way of remembering. Batteries should be checked at this time also.

**WHAT TO DO WHEN A FIRE OCCURS**

- Know the facility’s emergency procedures and your role in them (Yes, YOU have a role)
- Sound the alarm so the building occupants can escape
- Proceed to a designated assembly area outside the building
- If you are trained to do so, you might be able to fight a small fire with a portable extinguisher
- Choose the right extinguisher for the type of fire and keep a clear escape route
- As you leave, shut down machinery or process equipment according to the facility’s emergency plan
- Take fire drills seriously. They are organized to save lives and property in case of fire.
- Know the formal fire safety plan
- Have a specific escape plan

***In order to receive a Certificate of Completion for the “Fire Safety” education module, you must successfully complete the following quiz.***