

Wisdom for Your Life.

## UHS Fire and Life Safety



Environment, Health, Safety &  
Emergency Management (EHSEM)

### *Our Mission*

To serve through healing,  
education and discovery



# Overview

- The Fire Prevention Management Plan is designed to protect everyone within the facility from the danger of fire and provide guidelines for response in the event of an actual fire or fire drill.
- It is essential that all team members are familiar with the plan to react appropriately in a fire-related emergency and ensure the safety of the patients, visitors, other staff, and themselves.
- The Plan is available on Insite under EHSEM Policies and Procedures.

# Learning Objectives

- Upon completion of this module, you should be able to:
  - Identify the characteristics of a fire
  - Respond appropriately if a fire occurs
  - Operate a fire extinguisher
  - Recognize alarm and sprinkler systems
  - Be familiar with fire safety tips

# The Fire Prevention Management Plan

- The plan provides information and guidelines for fire safety prevention and response and describes how to:
  - Establish the fire safety criteria.
  - Protect patients, visitors, staff, and property from fires.
  - Ensure proper operation of fire detection, alarm, and suppression systems through a program of inspection, testing, and maintenance.
  - Provide portable fire extinguishers according to the criteria.
  - Ensure that curtains, furniture, waste baskets, bedding, and other equipment meet established fire safety criteria.
  - Investigate and recommend actions to correct deficiencies, failures, and user errors in established fire safety criteria.
  - Provide fire safety training for new personnel and annually thereafter.

# Fire Response Training

- All team members are trained in the proper response to fire/smoke conditions, and know their roles in such an event by participating in:
  - New team member orientation
  - Regular fire drills
  - Periodic retraining
- It is important every team member know the emergency escape plan (evacuation route and relocation point) in the event of evacuation.
- Team members must know what **Code Red** means and the response requirements.

# The Fire Tetrahedron

In order for fire to occur, four things must be present:

- Fuel
  - Something that will burn
- Oxygen
  - From the air surrounding the fire
- Heat
  - Hot surface or spark
- Chemical Chain Reaction
  - A self-sustaining chemical reaction that results from the combining two substances. In this case, fuel and oxygen combined with the heat cause a chemical reaction that gives off more heat. The production of heat sustains the chain reaction and the fire continues to burn.
- Fire extinguishers function by removing one of the four components of the fire tetrahedron.



# RACE

- RACE – What does it mean to me?
- In the event of a fire, you must act quickly.
- Initiate R.A.C.E. in the event of a fire or if you smell smoke, see smoke, or smell something burning.



# RACE

At the point of origin of the fire, think R.A.C.E.

- **Rescue**
  - Rescue anyone in immediate danger (patients, visitors, staff).
  - You must make the decision when to cease rescue operations and get yourself to safety.
- **Alarm**
  - Pull the nearest pull station. (Know the location of the 2 nearest pull stations in your area.)
  - Shout out “Code Red” until heard.
  - Call 305-4999 & give them the following information
    - Your Name, the Issue, and the Location





## RACE, cont.

- **Contain (Close & Clear)**

- Close all doors and clear the hallways.
- Close the door at the point of origin of the fire.



- **Extinguish/Evacuate**

- Extinguish the fire by using fire extinguisher if it is safe. (Know the location of the 2 closest fire extinguishers.)
- If fire is too large, evacuate the area and close the door to allow the suppression system to do its job. Allow the fire department or trained personnel to handle the fire.
- Do not re-enter the point of origin room after the door has been closed.
- If you use more than one extinguisher and the fire isn't out, close the door and leave it.

## Fire Extinguishers

- A fire extinguisher is one of the most common fire-protection appliances in use today.
- A portable fire extinguisher is excellent to use in the early stages of a small fire or to help you escape from a larger fire. It is a survival tool and not intended to be used to extinguish large fires.
- Fire spreads quickly. Always remember to follow **RACE** to alert the fire response team and fire department before spending precious time trying to extinguish a fire yourself.

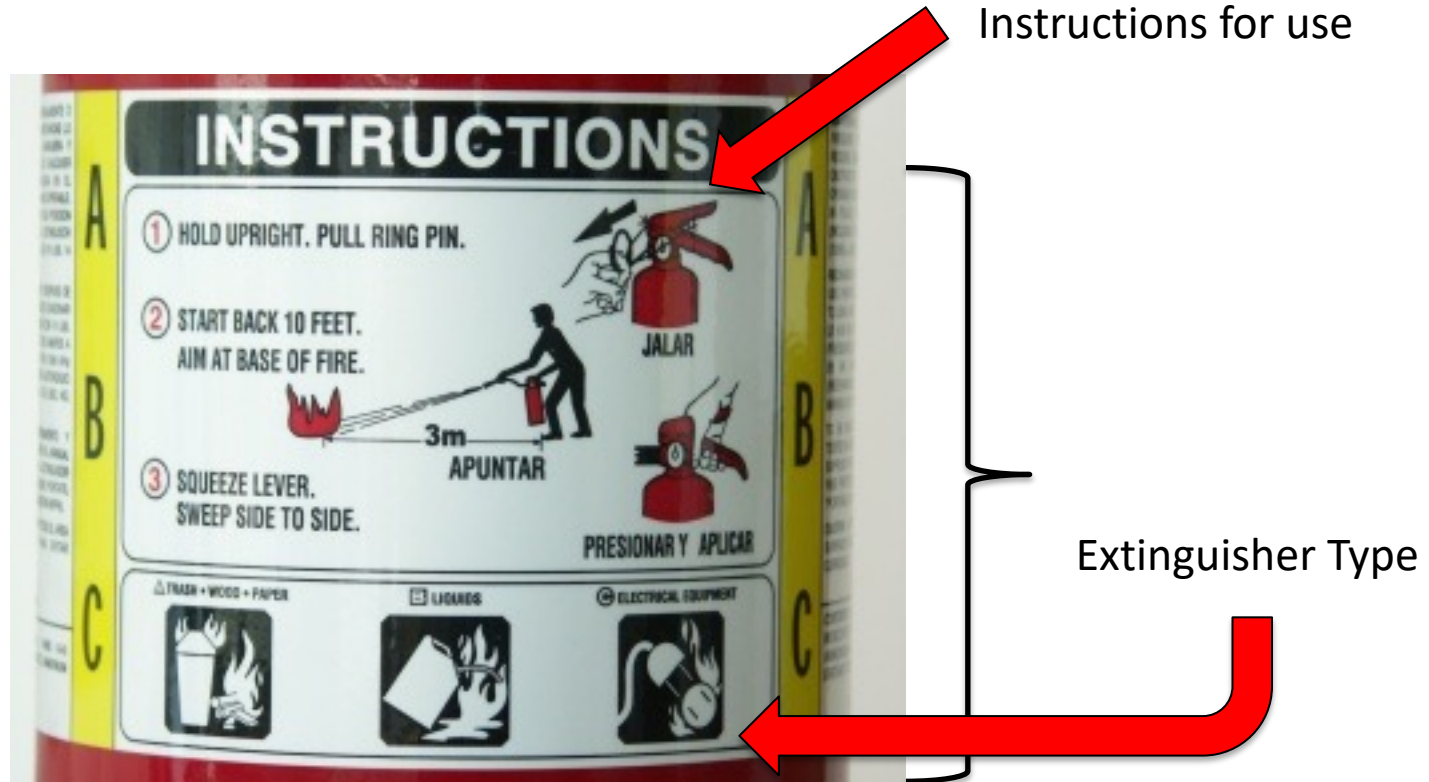
# Types of Fire Extinguishers

- There are different types of fire extinguishers for different types of fires
  - Type A - Ordinary combustibles such as wood, paper, cloth
  - Type B - Flammable liquids, greases, and gases
  - Type C - Energized electrical equipment  
(Once the electrical power is disconnected and dissipated, the fire becomes a Class A or B)
  - Type D - Metals such as magnesium titanium, zirconium, sodium, and potassium
  - Type K - Cooking oils and fats

## Fire Extinguishers Available at UTMC

- It is important to select the appropriate type of fire extinguisher for the fire.
- There are several types of fire extinguishers on site.
  - The majority of the fire extinguishers are ABC type, which can be used for Class A, B, and/or C fires
  - Class K fire extinguishers are in the cooking areas such as the cafeteria and main kitchen.
  - Water-based fire extinguishers for mattress fires (limited areas).
- The fire rating classification (or type) of the fire extinguisher is marked on the extinguisher's label.
- If you are not sure which extinguisher to use, leave it alone.

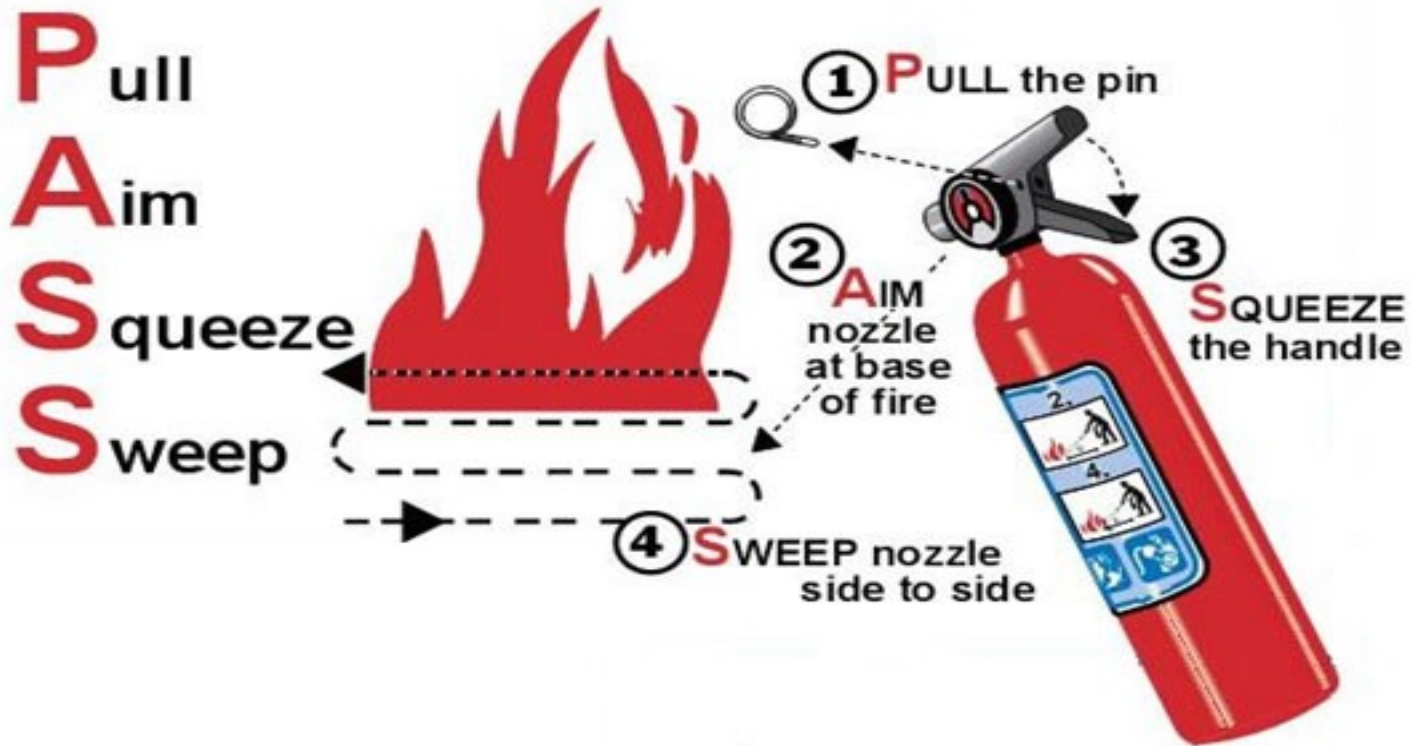
# Fire Extinguisher Label



# The Proper Operation of Fire Extinguisher

- Use the word PASS to remember how to operate fire extinguisher.

To operate an extinguisher:



# Evacuation

- Two types of evacuation are horizontal and vertical.
  - Horizontal evacuation - Evacuate horizontally to another building in the area by using the crossovers to other portions of the building such as East Pavilion to South Pavilion, South Pavilion to North Pavilion, West Pavilion to South Pavilion.
  - Vertical evacuation - Evacuate using stairwells because there is no option for horizontal evacuation (8 East to 12 East, 8 and 9 West) or after horizontal evacuation to exit the building.
- All team members should be familiar with their evacuation procedures and relocation points (horizontal and vertical).
  - Insite has a basic Evacuation Policy
  - Each department should have an evacuation map posted.
  - Relocation points should be identified by the department manager and discussed in department-specific orientation.

# Evacuation

- Team members should be familiar with various methods to relocate/evacuate patients.
- Beds, stretchers and wheelchairs can be used to evacuate patients.
- Ambulatory (walking) patients are easiest and the first patients to evacuate.
- Stryker Stair Chairs and MedSled Evacuation Sleds are used to evacuate patients vertically.
  - 8 East to 12 East, West Pavilion floors and NICU have this equipment.
  - Training modules are available in TMS.





# Evacuation

- Hand carry techniques used to evacuate patients include:
  - Blanket carry
  - Packsaddle carry
  - Fireman's carry
  - Four-hand carry
  - Arms carry
  - Neck drag carry
  - Blanket drag
- See policy EP-05 (Evacuation Plan) in the EHSEM policies on Insite for details regarding these techniques.

# CAR

- The acronym CAR is used when the fire (Code Red) is not in your area.
- C – Contain the fire
  - Close all doors to contain the spread of smoke.
  - Remove equipment, carts, etc. from the hallways.
- A – Assign someone to the phone
  - In the event of an evacuation or need of assistance, ensure a team member is available to make or answer emergency calls.
- R – Remain alert
  - Fire is unpredictable.
  - Be aware of and report any change in conditions in your area.
  - Be prepared to respond to the spread of smoke or fire into your area.

## Important Code Red Response Tips

- Remember RACE and CAR (and know what they mean).
- Remain in the area and inform your supervisor/manager of your location.
- Someone must take charge at the fire (point of origin) and away from the fire during a Code Red to ensure the response is per the Fire Plan.
- Activate the nearest manual fire alarm pull station when there are visible flames, visible smoke, smell of smoke, unusual heat, or other indications of fire – even if uncertain if the conditions are caused by a fire.

## Fire Safety Tips

- The following items are fire safety tips that all team members must be aware of to ensure we are compliant with The Joint Commission, adopted fire codes, State and Federal Regulations, etc.
  - Do not block or obstruct passageways/hallways/exits.
  - Storage is prohibited in the corridors/hallways and stairwells.
  - Do not block or obstruct fire extinguishers, pull stations, and medical gas shutoffs.
  - Do not prop open fire doors.
  - Know your role for fire response.
  - Do not purchase unapproved furniture, curtains, equipment, electrical appliances, outlet strips, etc.

## Fire Safety Tips, cont.

- Use approved hospital grade Electrical (Power) Outlet Strips
- Approved Electrical (Power) Outlet Strips
  - UL 1363A to be used in Patient Care Vicinity (where patients are treated)
  - UL 1363 to be used in areas outside of Patient Care Vicinity



Approved outlet strips will have a green dot.

# Fire Alarm Systems/Sprinklers

- Fire Alarm Systems consist of many components that are used to alert occupants of fires. These systems consist of:
  - Smoke Detectors
  - Heat Detectors
  - Pull Stations
  - Sprinkler Systems
    - Do not stack items within 18” of the sprinklers because it will obstruct the spray.
  - Alternative Suppression Systems
    - Carbon Dioxide Suppression Systems
    - Halogen Systems
    - Commercial Kitchen Hood Suppression Systems

Treat alarms from these systems as you would any alarm.

## Conclusion

- You have completed the training content for this lesson. Using the skills presented, you should now be able to:
  - Identify characteristics of a fire
  - Respond appropriately if a fire occurs
  - Operate fire extinguisher
  - Recognize alarm and sprinkler systems
  - Be familiar with fire safety tips