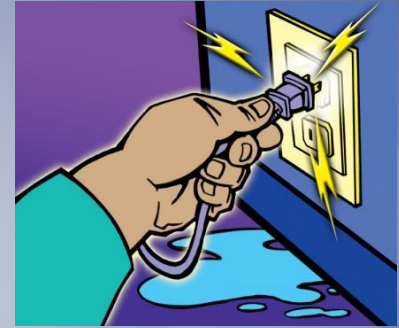




Fire and Electrical Safety



Course Objectives

- The learner will be able to identify fire and electrical hazards at their workplace
- The learner will be able to identify fire and electrical hazard prevention measures
- The learner will understand their role and responsibility in responding to a fire

Know hazards where you work

Fire Hazards

- Burnable liquids, including alcohol based hand rubs (ABHR)
- Cylinders & Medical Gas Valves
- Obstructions & Corridor clutter
- Doors that are in disrepair

Electrical hazards

- Electrical cords, plugs, outlets
- Equipment

Alcohol Based Hand Rubs (ABHR)



- ABHR's are a flammable liquid and will burn
- Do not touch electrical equipment or hot items until your hands are dry
- Beware of static electricity until dry

Cylinders & Medical Gas Valves

- If you see an unsecured or improperly stored cylinder put it away
- Store full or unopened cylinders separately from used or open cylinders
- It may become necessary during a fire to turn off the medical gas to a specific zone
- This is done to prevent spread of the fire, or protect a patient in an oxygen rich environment
- Know your facilities procedures for shutting off medical gases
- Know how to identify the correct valve and how to use it



Obstructions & Clutter

- Elevator lobbies, corridors, and stairwells should be kept clear
- Do not place anything in front of fire extinguishers, fire pull stations, or other emergency equipment
- Items in use, and isolation carts are permitted
- During a fire alarm, put away all equipment



Doors



- If doors do not close and latch they will not be able to contain smoke and fire
- Do not block or wedge doors open
- Latches should not be taped
- Report doors that do not close and latch to maintenance

Electrical Hazards

- Grasp the plug to remove it from an outlet, never pull the cord
- All life support and essential equipment should be plugged into the red outlets, which are on emergency power
- Check equipment, including power cords, for damage before use
- Place all damaged or malfunctioning equipment out of service and report to maintenance



Electrical Hazards

- ✦ Protect cords from mechanical damage and away from sharp edges.
- ✦ Keep cords out of the way of traffic or doorways.
- ✦ Avoid using extension cords.
- ✦ Electrical plug strips (power strips) must NOT be purchased and brought into the hospital by departments. If you need to have additional electric outlets, contact Facilities Management.

Electrical Hazards

- ✦ Inspection tags should be affixed to equipment to indicate that the equipment was inspected before it was put into use.
- ✦ If the equipment has met Beaumont Risk Assessment criteria to be included in the scheduled maintenance program, the next due date is indicated in the “Next Inspection Due Date” field.
- ✦ Any piece of equipment that is found "out of date" should be reported to maintenance.

Fire Response

- Know what your fire alarm signal sounds like
- When and how to use the fire alarm
- When and how to use the code phrase
- What to do if you hear the code phrase
- What to do during a fire alarm in your area or another area
- How to contain or confine fire and smoke

Fire Alarm Signals

- Know what your fire alarm signal sounds like – chime, horn, bell, siren
- Bases may say “FIRE” or “ALERT”
- Strobes without sound may be used in some places



Fire Response



Use **RACE** as a reminder of what to do in case of a fire!

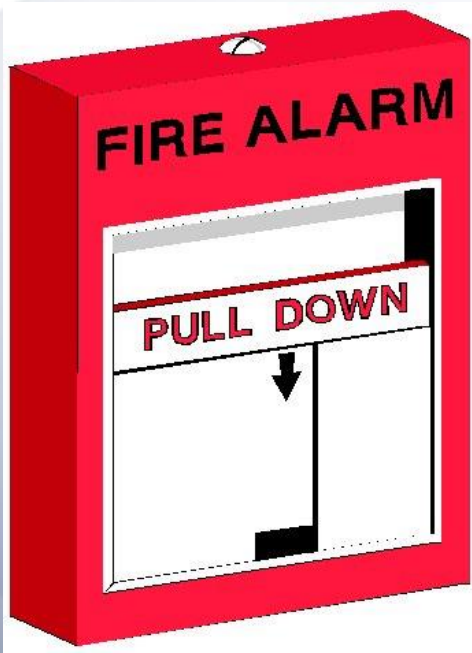
- Rescue
- Alarm
- Contain or Confine
- Extinguish or Evacuate

Rescue

- Hospital
 - Rescue or remove anyone in immediate danger
 - Relocate everyone to an adjoining smoke zone
- Non-Hospital
 - Evacuate the building or designated areas per your plan
- Signify a room is vacant by placing a diagonal stripe with tape or marker across the lower part of the door



Alarm



- Alert other staff with the code phrase
 - Beaumont “Red Alert”
 - Botsford “Dr. Firestone”
 - Oakwood “Code Red”

Use the fire alarm whenever there is a fire, smoke, or the odor of smoke

- Activate the fire alarm by using a pull station
 - Pull stations are located at exits, stairwells and many nurse stations
- Fire alarm boxes work by pulling down on the lever.
 - If the fire alarm box has a cover, remove the cover and then pull the lever down
- Report the fire
 - Follow **your facility response plan** and report to Security or Operator as appropriate

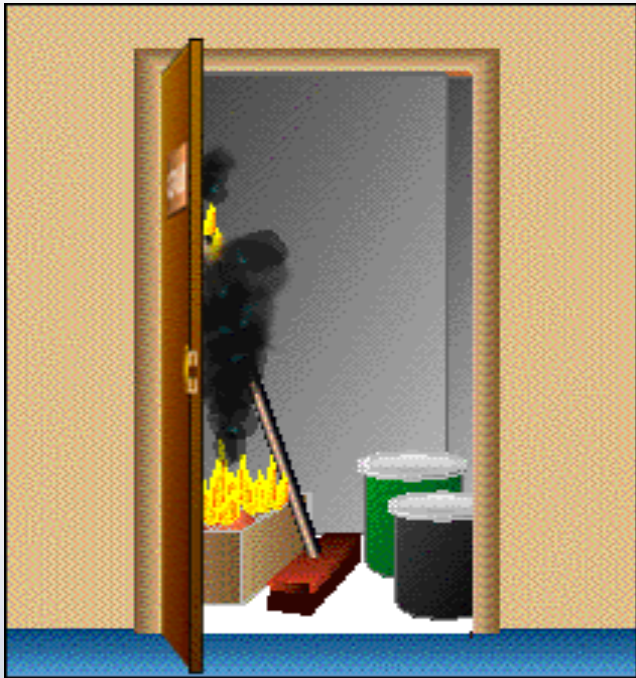
Alarm

To report a fire:

- Beaumont Hospital, Royal Oak: 80911
- Beaumont Hospital, Troy: 40911
- Beaumont Hospital, Grosse Pointe: 3911
- Botsford Hospital: 8333
- Oakwood Hospitals: 811
- Offsite locations: 911 or 9-911



Contain or Confine



- Contain fire and smoke by closing doors
- Make sure that cross-corridor doors are shut
- Closing a door can:
 - prevent the spread of smoke and fire
 - cut off flow of air to the fire

Extinguish

Extinguish a small fire if you can do so safely

- Smother the fire with a lid for the pot or pan, or a blanket on a person or trash can
- Turn off the electricity or unplug electrical equipment
- Use a fire extinguisher



Evacuate



- Know your evacuation procedures
- Know where evacuation equipment is if you have it
- Know how to use the evacuation equipment you have

Evacuation

- Evacuation is used to move people away from the fire and smoke
- Evacuate those in immediate danger, then ambulatory, semi-ambulatory, and non-ambulatory
- Evacuation can be partial or complete

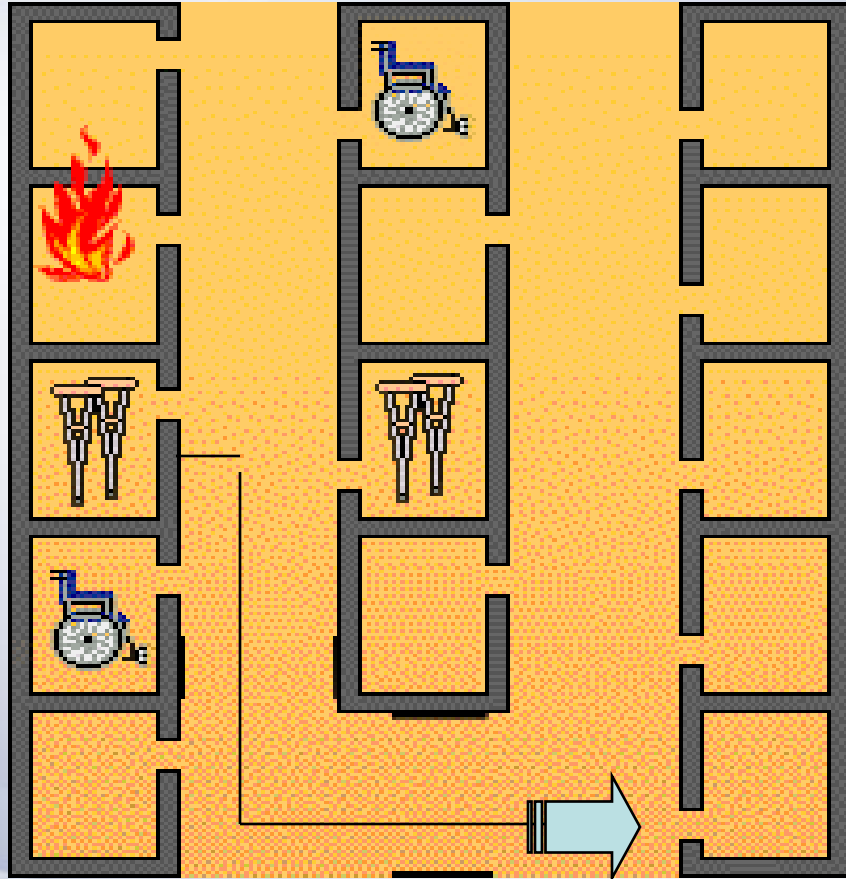
Partial Evacuation

- can be internal or external
- can be **horizontal** on the same floor, or **vertical** to another floor

Complete Evacuation

- is external
- used for most buildings and limited situations in difficult to evacuate buildings

Horizontal Evacuation

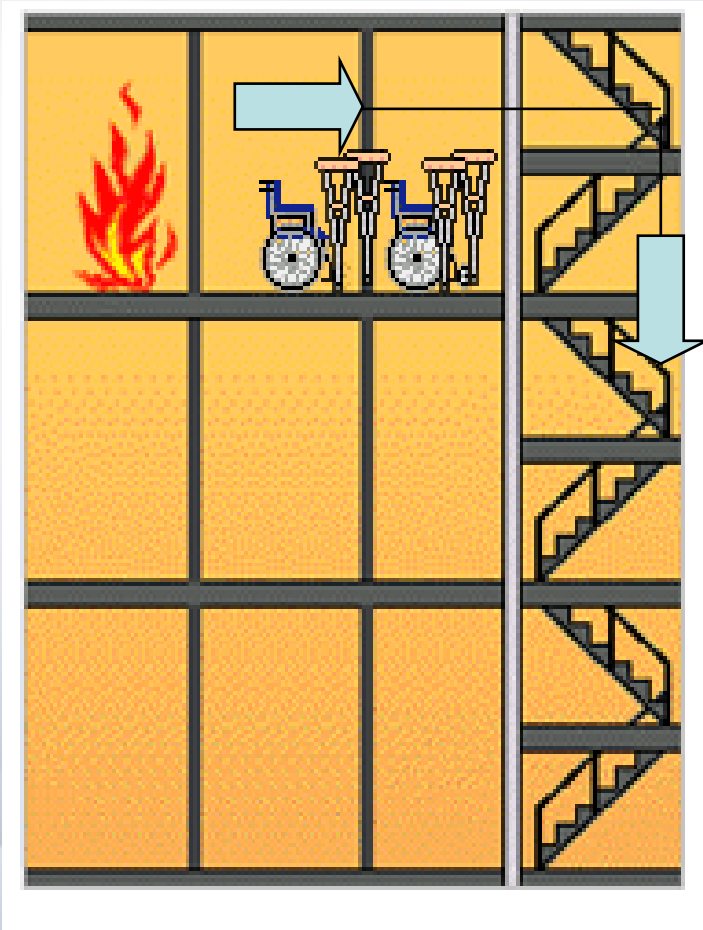


Fire/Smoke Doors

Horizontal Evacuation

- Move past at least one set of fire or smoke doors

Vertical Evacuation



Vertical Evacuation

- Involves moving down the stairs to a lower floor or outside
- Know how to prepare patients to evacuate to another floor
- Know if your plan allows the use of elevators

External Evacuation

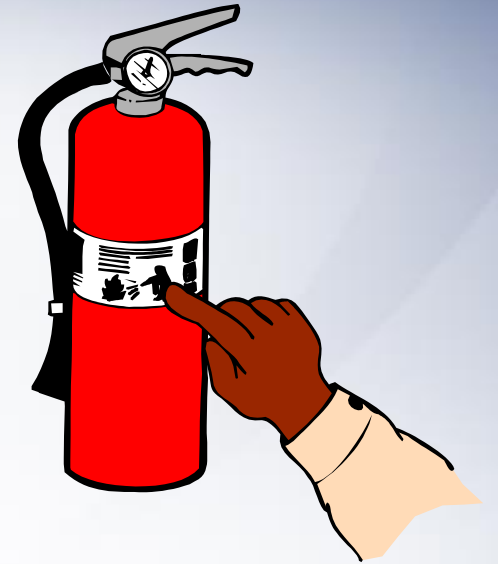
- Know how to prepare patients for external evacuation
- Move to the meeting place, away from the building, for safety and to be out of the way of firefighters.
- Report to the incident commander or representative and identify if everyone did or did not get out.

Fire in Another Department

| Hospital | Non-Hospital |
|--|--|
| <ul style="list-style-type: none">• Respond to the fire alarm only if that is part of your duties in a fire• Go about your normal duties and follow instructions given by Security or the Fire Department | <ul style="list-style-type: none">• Respond to the fire alarm only if that is part of your duties in a fire• Evacuate if the fire alarm is sounding in your area, you see smoke or fire, or if instructed to do so• Go to the designated meeting place |

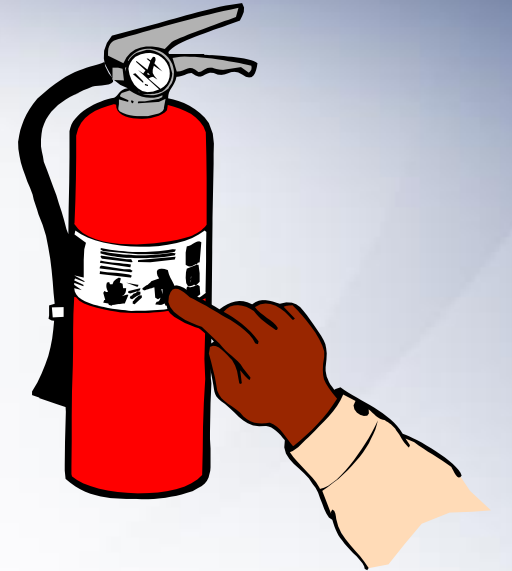
Fire Extinguishers

- Know where to find a fire extinguisher
 - Fire extinguishers may be in cabinets or hung from the wall
 - They may have a sign marking their location
 - Near exits and hazardous areas
- Know when to use a fire extinguisher
 - Small fire only
- Know how to use a fire extinguisher
 - Remember PASS – Pull, Aim, Squeeze, & Sweep



Dry Chemical Fire Extinguishers

- Multipurpose (ABC) Dry Chemical is used for paper, cloth, burnable liquids, and electrical fires
 - Most common type
 - Effective
 - Can be used on most types of fires
 - Non-toxic



Specialty Fire Extinguishers

- Special purpose fire extinguishers are used for fires in certain areas - computer rooms, commercial kitchens, procedure and operating rooms, and MRI's
- Know how to find and use these special fire extinguishers if you work in one of these areas
- Most fire extinguishers are ferrous (magnetic) and should never be used near an MRI
- In MRI rooms, only use fire extinguishers that have this symbol



How To Use A Fire Extinguisher



Use **PASS** as a reminder of how to use a fire extinguisher

Pull

Aim

Squeeze

Sweep

Interim Life Safety Measures

- Interim Life Safety Measures (abbreviated ILSM) are temporary measures used when life safety features are insufficient or out of service
- Life safety features include doors, walls, fire alarms, fire sprinklers, exits, emergency lights and other building features designed to keep you safe
- If an ILSM is used in your area, you will be provided with information as to why the ILSM is being used and what the ILSM is

Questions?

Contact Environment and Life Safety

Will Wilson
Fire & Life Safety Coordinator
Beaumont Health
248-551-7085