CASE WESTERN RESERVE UNIVERSITY

| FACILITIES PERSONNEL<br>FIRE EXTINGUISHER SAFETY PROGRAM | | |
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## Objective

- The purpose of the Fire Safety Program of Case Western Reserve University (CWRU) is to protect its employees who must exit from an area where a fire hazard is present. This program applies to the placement, use, maintenance and testing of portable fire extinguishers provided for the use of employees and also provides basic safety guidelines when trying to exit a building when a fire occurs.

  Also, the goal of this program is to eliminate the causes of fire, prevent loss of life and property by fire and to comply with the Occupational Safety and Health Administration's standard on fire prevention, 29 CFR 1910.39, which provides employees with information and guidelines that will assist them in recognizing, reporting and controlling fire hazards.

  The CWRU's Environmental Health and Safety Department (EHS) or their designees are solely responsible for all facets of this program and has full authority to make necessary decisions to ensure its success. The directors of EHS are the sole persons authorized to amend these instructions and are further authorized to halt any operation where there is a danger of serious personal injury.

  Nonetheless, fire safety is everyone's responsibility. All employees should know how to prevent and respond to fires and are responsible for adhering to company policy regarding fire emergencies.

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## 1.0 Definitions

- *Audible Fire Alarm Notification Appliance*: A fire alarm system component that alerts by the sense of hearing (e.g., bell, horn, message, tones, etc.)

- *Cause of Fire*: The factor or factors that give rise to a fire; the causal factor may be, but is not limited to, the result of an intention or unintentional action, mechanical failure or act of nature: Higher Education Opportunity Act (HEOA).

- *Fire*: Any instance of open flame, or other any other burning, in a place not intended to contain the burning or in an uncontrolled manner (HEOA)

- *Fire Alarm System Monitored by CWRU PD*: The building's fire alarm system transmits a signal to the CWRU Police Department's dispatch center which is constantly attended 24 hours a day seven days a week. Some fire alarm systems will provide the exact location to the dispatcher of the activated device in the building. This allows the Police and Fire Departments to know the exact location of the area of concern in the building before they arrive.

- *Fire Drill*: A supervised practice of a mandatory evacuation of a building for a fire

- *Fire Extinguishers*: A portable device containing a specialized agent that can be used to extinguish a fire; Fire extinguishers are installed throughout the buildings in accordance with the Ohio Fire Code.

- *Fire Rated Doors, Walls and Partitions (Passive Fire Protection Systems)*: Passive fire protection systems are components of a building designed to have a certain degree of fire resistance. These components are designed to contain the spread of smoke and fire gases and prevent the spread of them to a certain area for a reasonable period of time. Fire rated doors, walls and partitions are installed in areas to protect the evacuation of the occupants.

- *Fire Related Injury*: Any instance in which a person is injured as a result of a fire, including an injury sustained from a natural or accidental cause while involved in fire control, attempting rescue or escaping from the dangers of the fire; The term "person" may include students, employees, visitors, firefighters or any other individuals as part of HEOA.

- *Fire Related Death*: Any instance in which a person (1) is killed as a result of a fire, including death resulting from a natural or accidental cause while involved in fire control, attempting rescue or escaping from the dangers of a fire; or (2) dies within one year of injuries sustained as a result of the fire (HEOA).

- *Heat Detectors*: Devices that are only activated by heat; They are used in areas where smoke or steam is likely to be present (e.g., kitchens, bathrooms and mechanical rooms).

- *Intentional Fire (Arson)*: A fire that is ignited under circumstances in which the person knows that the fire should not be ignited (NFPA 921); Example: Knowingly igniting papers on fire on a bulletin board

- *Kitchen Hood Suppression System*: A specially designed fire protection system to extinguish fires that occur on a kitchen's stove; Upon activation of the system, it will release the suppression agent and activate the building's fire alarm system. Kitchen hood suppression systems can be found in the common cooking areas (if available) in residence halls.

- *Smoke Detectors*: Devices that detect visible or invisible particles of combustion (NFPA 72)

- *Smoke Detectors (fire alarm initiating)*: Smoke detectors automatically trigger fire alarm systems in campus buildings.

- *Smoke Detectors (single station, battery operated)*: Smoke detectors are not connected to the building's fire alarm system and only sound locally.

- *Sprinkler System*: A system of piping that is designed to deliver water on a fire to control or extinguish it; The sprinkler heads in the residential facilities are only activated by heat, not smoke, or a pull station.

- *Undetermined:* A cause classification for fires whenever the cause cannot be proven to an acceptable level of certainty (NFPA 921)

- *Unintentional Fire (Accidental)*: A fire that does not involve an intentional human act to ignite or spread fire into an area where the fire should not be (NFPA 921). Examples: Cooking related fire, smoking materials, open flames, electrical, heating equipment, etc.

- *Value of Property Damage*: The estimated value of the loss of the structure and contents in terms of the cost of replacement in like kind and quantity; This estimate should include contents damaged by fire and related damages caused by smoke, water and overhaul however, it does not include indirect loss such as business interruption (HEOA).

- *Visual Fire Alarm Notification Appliance*: A fire alarm system component that alerts by the sense of sight (e.g., strobe lights)

## 2.0 Evacuation Policy

- Campus building evacuations
    - In addition to adhering to fire policies, all maintenance and facilities' personnel must also understand and practice policies regarding activities during a fire alarm at CWRU. If a staff member discovers smoke or an actual fire, they should immediately pull the nearest fire alarm and evacuate the building. Upon exit of the building, they should dial 216.368.3333 to report the fire. All building occupants should become familiar with posted evacuation routes and procedures for their buildings. These are typically located near elevators, stairwells and exits. All personnel residing in, or present in, any university residence hall must evacuate the building when a fire alarm sounds using stairwells and exits. All building occupants should know and memorize two exits from the building and understand that an evacuation may require you to evacuate a smoke filled area. In the case of smoke, stay low and check all doors before proceeding to an exit. Windows may also be an exit option in some buildings. Should you need to exit from a window, verbally summon the assistance of a first responder before attempting to exit a building from a window. Upon exiting the building, occupants must move to a location away from the building and fire equipment until notified that the building is clear to be re-occupied by first responders. After evacuating, if you know of an occupant that may still be in the impacted building, provide that information to first responders by giving the name and location of the individual so they may assist them.

- Evacuation procedure
    - If you smell or see smoke or fire, activate the fire alarm by pulling an alarm station. When a fire alarm is activated, evacuation is mandatory!
    - Do not attempt to fight the fire yourself unless you have been trained in the use of firefighting equipment and it is safe to do so.
    - Notify occupants and help those needing assistance in the immediate area.
    - If fire is present in the immediate area, leave all belongings and exit immediately. Otherwise, when an alarm sounds, quickly gather essential personal belongings only if it can be done safely (I.D., keys, purse, wallets, etc.) and proceed out of the building. Close doors behind you to help contain the fire.

- Follow the building's evacuation map and exit quickly via stairwells only. DO NOT attempt to use elevators. Persons with disabilities who are unable to use the stairs should wait in the stairwell for rescue assistance.

- If you get caught in heavy smoke, take short breaths, crouch down or crawl.

- If the fire or smoke prevents you from exiting the building, go to a room far away from the fire (preferably a room with a window), shut the door and phone for help (cell phone or room phone). If you cannot reach outside help using technology, open or break a window and signal for help. Placing an object (coat, blanket, towel, etc.) under the door may prevent smoke from intruding while you are awaiting rescue.

- Once outside, proceed to the evacuation assembly area. If emergency responders are not already on the scene, call CWRU police/security dispatch with the following information: your name, the exact location of the fire and any other pertinent information you may have about the fire.

- Return to the building only when instructed to do so by emergency personnel.

- Role of dispatch

  - The dispatcher will notify the appropriate fire department and CWRU police/security.

  - CWRU police/security will respond and coordinate with the responding fire personnel.

  - Once the actual fire or fire alarm situation is resolved and the building is assessed for safety concerns, CWRU police/security or fire department officials may grant permission to re-occupy the building or to enter and retrieve personal belongings.

## 3.0 Fire Response Procedures

- **RACE** procedure

  - Generally, the **RACE** procedure is used in all University facilities with some variations. Always consult and follow the building specific Building Emergency Action Plan or posted evacuation procedures.

- If you discover a fire or smoke condition, remember **RACE**.
- **Rescue** any person in immediate danger as long as it does not put you in harm's way.
- **Alarm** – pull the fire alarm to alert everyone. Report the incident by calling the police and security of CWRU, 216.368.3333.
- **Confine** the fire by closing all doors where possible. If possible, turn off electric and gas equipment in your area as you evacuate.
- **Evacuate** using the nearest stair exit. Follow the exit signs.

- Fire alarm/announcement procedure
  - Follow the emergency procedure for your building area.
  - Follow the announcements on the public address system or instructions of your area floor captain.
  - Evacuate or stand by and stay alert as instructed on the public address system.
  - Follow the EXIT signs. Use Stairs. **Do Not Use Elevators**. Walk at a normal pace.
  - Wait outside in the designated assembly areas at least 50 feet or more away from the building as instructed.
  - Re-enter the building only after the "All Clear" signal is announced.

## 4.0 Fire Extinguishers

- Portable fire extinguishers of appropriate type and size are provided as required in all areas. Extinguishers are inspected, tested, maintained and documented as required by the Ohio Fire Code.
- Fire extinguishers are provided throughout all university buildings for the use by trained facilities personnel.
- Fire doubles in size every 30 seconds. Therefore, knowing how to properly and safely extinguish a fire is a huge advantage. An average extinguisher discharges completely in less than one minute. Under the Ohio Fire Code, there is a 75 foot travel distance between all extinguishers.

## 5.0 Extinguisher Safety Precautions

- Before using a fire extinguisher, ALWAYS pull the building fire alarm FIRST.
- Do not attempt to use a fire extinguisher if the fire is large and spreading. Use it only for small fire defense (personal safety).
- Do not use the fire extinguisher if the lock pin is tampered, the cylinder is damaged or if the pressure gauge pointer is in the RECHARGE zone.
- Do not use the fire extinguisher if you are not trained and confident about your extinguisher abilities.
- Read the extinguisher label to check if it is the right type for the kind of fire at hand. The label indicates fire classes and symbols and specific applications for which is can be used.
- Protect yourself at all times.
- Stay low. Avoid breathing the heated smoke and fumes.
- If the fire cannot be controlled, leave building immediately and get to safety.

## 6.0 How to Use a Fire Extinguisher

- Make sure you are using the proper extinguisher for the type of fire.
- Always make sure the fire alarm is currently activated before attempting to extinguish.
- Position yourself at a safe distance from the fire (e.g., seven to 10 feet).
- **PASS** procedure:
    - **Pull** the pin. This unlocks the operating lever and allows you to discharge the extinguisher.
    - **Aim** low. Point the extinguisher nozzle/horn/hose at the base of the fire.
    - **Squeeze** and hold the handle to discharge the extinguishing agent without any interruption.
    - **Sweep** slowly from side to side as you are holding and squeezing the handle.

- Move closer, carefully, as the fire gets smaller and as you continue spraying. Watch the fire area until it has completely cooled down.

- Report the discharged extinguisher to Mike Arnone, 216.368.8655.