

UT Health Science Center:	
FS5302 – Portable Fire Extinguisher Policy	
Version 1	Publication Date: 06/14/2022

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Related Policies: UT System Safety Policy SA0100 UT System Safety Policy SA0700		
Forms:		

PURPOSE, SCOPE, AND APPLICABILITY

The University of Tennessee Health Science Center (UTHSC) provides and maintains portable fire extinguishers in all facilities for use in the event of a fire. The extinguishers, as well as their installation and maintenance, must meet requirements found in National Fire Protection Association (NFPA) standard number 10.

This policy applies to all buildings under the control of the University of Tennessee Health Science Center. UTHSC has established and implemented a written fire safety policy which requires the immediate and total evacuation of employees from the workplace upon the sounding of a fire alarm signal and which includes an emergency action plan and a fire prevention plan which meet the requirements of 29 CFR 1910.38 and 29 CFR 1910.39.

Though employees are not mandated to attempt to extinguish a fire, UTHSC promotes training and education for employees to extinguish *small*, *initial stage fires*. This is due to the nature of the Campus environment (laboratories, clinics, etc) to mitigate the spread of a fire, and to preserve life and property.

Therefore, UTHSC shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury. Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of hazard which would affect their use.

ABBREVIATIONS, ACRONYMS AND DEFINITIONS:

- 1. SFMO: State Fire Marshal's Office
- 2. NFPA: National Fire Protection Association
- 3. **PFE: Portable Fire Extinguishers**
- 4. UTHSC FSO: University of Tennessee Health Science Center Fire Safety Officer



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5. UTHSC PD: University of Tennessee Health Science Center Police Department

RESPONSIBILITES:

1. Supervisors and Employees shall:

- a) Attend training, as applicable, in traditional classroom or non-traditional offerings as directed by the UTHSC FSO.
- b) Use PFE for incipient (initial) stage fires when safe to do so
- c) Report any problems with PFE's to the UTHSC FSO.
- d) Not block, obstruct, hide, relocate or otherwise disable PFE's.

2. Campus Safety shall:

- a) Provide training and training resources for PFE's on campus
- b) Be responsible for the overall management of the PFE's at or on UTHSC property including, but not limited to purchase, installation, inspections, keep records, contracting licensed vendors for the purpose of service, and designating number and location of installation of all extinguishers.

3. Contractors and Subcontractors shall:

- a) Ensure that a fully qualified PFE program is in effect with the contractor/sub-contractor organization. The program is the responsibility of the Contractor and Subcontractors, individually. If a contractor sub-contracts to complete the work, then the Contractor is responsible for verification and compliance of the PFE program of the subcontractor.
- b) When engaged in work that requires the use of a PFE, the contractor must supply independent PFE's, including any training, at own cost and resources.
- c) PFE's must meet all inspection criteria, at a minimum, to this policy. PFE's must be available for inspection by the UTHSC FSO, or SFMO.
- d) Unless, in the event of a fire emergency, contractors shall not use UTHSC PFE's.
- e) Ensure full adherence to UTHSC's policies.
- f) Provide appropriate personal protective equipment or other hazard control measures appropriate with work being conducted
- g) Provide certifications of training when applicable, and requested.
- h) Ensure that his or her employees are appropriately trained and authorized.
- i) Ensure that a safety briefing has been completed prior to any work initiated, with all personnel involved including applicable University staff.

FIRE PREVENTION PLANNING:



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Though the purpose of this policy concerns Portable Fire Extinguishers, it would be prudent to mention mitigation of fires by prevention. Many areas on campus have various hazards stored (flammables, reactive chemicals, etc) due to the nature of the work that UTHSC provides.

The primary purpose of fire prevention planning is to prevent fires from starting. Fire prevention procedures are for preventing, detecting and extinguishing fires. Fire prevention starts with identifying the fire hazards.

UTHSC has developed a full Fire Prevention Plan. Under this plan, faculty, staff, and students will be informed of the plan's purpose, preferred means of reporting fires and other emergencies, types of evacuations to be used in various emergency situations, and the alarm system(s). The plan is closely tied to our emergency action plan where procedures are described for emergency escape route assignments, accounting for all employees after emergency evacuation has been completed, and rescue and medical duties for those employees who perform them.

Self-Inspections:

Each department, area or building is required to develop Self Inspection Program. A self-inspection program is a program designed for the employee to be actively involved in the safety of their area and facility. Campus Safety encourages all departments to have a fire and safety self-inspection program to ensure the facility is safe and that any safety hazards can be identified and mitigated appropriately.

This program addresses the following issues:

- Fire hazards and proper handling and storage procedures
- Potential ignition sources for fires and their control procedures

Contact Campus Safety, or Research Safety for guidance on hazard identification in your area.

PROCEDURE:

Selection and Installation:

- 1. Extinguishers must be of the type required for the class of fire anticipated in the area.
- 2. Extinguishers must be kept in their designated place when not in actual use. If it is necessary to permanently move or block a PFE, please contact Campus Safety.
- 3. Extinguishers removed from service will be replaced with an extinguisher that meets or exceeds code requirements.



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- 4. Maximum travel distance to extinguishers must not exceed 75 feet in any direction or 50 feet where flammable liquids are present.
- 5. All extinguishers will be located so they are readily available when needed.
- Cabinets housing fire extinguishers must not be locked except where malicious use of the extinguisher is anticipated. Cabinets locked for this reason must include means of emergency access.
- 7. Extinguishers must be installed as follows:
 - a. Extinguishers less than or equal to 40 pounds in weight must be installed so that the top of the extinguisher is not more than five feet (60 inches) above the floor.
 - b. Extinguishers more than 40 pounds (except wheeled type) must be installed so the top of the extinguisher is not more than three and one half feet (42 inches) above the floor.
 - c. In no instance will the bottom of the extinguisher be less than 4 inches above the floor.
- 8. Every attempt will be made to make ABC (multi-purpose) dry chemical extinguishers standards on campus. However, it is recognized that other types (e.g. type K for kitchens) will also be installed.

Maintenance, Testing and Inspection:

UTHSC shall be responsible for the inspection, maintenance and testing of all portable fire extinguishers in the workplace.

Monthly Inspections: Fire extinguishers shall be inspected monthly and a record maintained by the UTHSC FSO. In some cases, the inspection shall be performed quarterly. Inspections are completed by UTHSC Campus Safety staff, or by qualified and trained contractor resources.

- 1. The record shall consist of punching the inspection tag and in the inspector's record sheet.
- 2. Extinguishers must be subjected to "annual certifications" not more than one year apart. The extinguisher's seal (color or year) shall indicated completion of the annual certification.
- 3. Each extinguisher must have a tag or label attached that indicates the month and year the last annual certification was performed, the identification of the person performing the certification, and whether any service was performed.

Annual Inspections: UTHSC shall assure that portable fire extinguishers are subjected to an annual maintenance check. Stored pressure extinguishers do not require an internal



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examination. The employer shall record the annual maintenance date and retain this record for one year after the last entry or the life of the shell, whichever is less.

Dry Chemical PFE: UTHSC shall assure that stored pressure dry chemical extinguishers that require a 12-year hydrostatic test are emptied and subjected to applicable maintenance procedures every 6 years. Dry chemical extinguishers having non-refillable disposable containers are exempt from this requirement. When recharging or hydrostatic testing is performed, the 6-year requirement begins from that date.

Hydrostatic Testing: UTHSC shall assure that hydrostatic testing is performed by trained persons with suitable testing equipment and facilities. Hydrostatic testing shall meet all OSHA, NFPA, or other applicable regulatory standards.

Use of Portable Fire Extinguishers:

Portable fire extinguishers (PFE's) are found in most buildings on campus. When used properly, PFE can save lives and property by putting out a small fire or containing it until the fire department arrives. PFE however, are not designed to fight a large or spreading fire. Extinguishers can be used to allow you to safely exit a burning building.

At a minimum, when a PFE is deployed for use, the following standardized methods shall be employed:

RACE and PASS

- ➤ **R** RESCUE /REMOVE anyone in immediate danger
 - A Activate the Manual Fire ALARM
 - **C** CONFINE the fire (close the door)
 - **E** EXTINGUISH small controllable fires/or EVACUATE
- **P** PULL the pin
 - A AIM the nozzle at the base of the fire
 - **S** SQUEEZE handle
 - **S** SWEEP from side to side

GENERAL TRAINING AND INFORMATION REQUIREMENTS

The US Occupational Safety and Health Administration (OSHA), as promulgated in CFR 1910.157(g)(1) [and (2)] requires that, where an employer has provided portable fire



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extinguishers for employee use in the workplace, it shall also provide an educational training program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage firefighting and training in the use of appropriate equipment.

The education and training shall be provided upon initial employment and at least annually, thereafter.

PFE training is required for those who intend, or are expected, to use a fire extinguisher to put out a small fire in their work area, especially those who work in laboratories.

Required Training:

Those that require training include:

- Facilities Management Trades: Electricians, Plumbers, Carpenters, Welders, Etc.
- Transportation: Gas pumps attendants & mechanics.
- Special Events Organizers: Hosting Staff
- **Public Safety:** Police, Security Officers
- Faculty, students, or staff: Any members who are assigned to work or study in a laboratory using flammable and/or combustible liquids or chemicals for the purpose of research or instructional needs. This includes persons that work in chemical storage rooms or facilities.
- **Food Services:** All staff members who work in kitchens or cooking operations where commercial cooking devices are utilized.

Traditional Classroom Training (Hands On): The Campus Fire Safety Officer conducts hands on fire extinguisher training. This is the preferred method as it gives, at a minimum, trainees the opportunity to discharge the type(s) of portable extinguisher(s) they are designated to use as part of their training.

- 1. Classes of fires and the types of extinguisher needed to extinguish each
- 2. Limitations of PFEs
- 3. Personal protection precautions
- 4. PASS procedure for extinguishing fires
- 5. RACE procedure for extinguishing fires
- 6. Hands-on extinguishing of an actual fire

Completion of this training qualifies for 1-hour HR 128 credit.



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Non-Traditional Training: OSHA regulations do not require hands on training to meet the education requirements. UTHSC may also authorize methods such as:

- 1. utilizing "toolbox talks",
- 2. safety videos,
- 3. online classes,
- 4. and/or informational brochures on the required topics.

However, it must be noted that the UTHSC FSO must approve any non-traditional training platform, and must meet all of the traditional class room topics above, less hands-on extinguishment. Records of completion, or logs of such training shall be forwarded to the UTHSC FSO.

Further information can be found on this topic by contacting Campus Safety.

ATTACHMENTS:

None

ASSOCIATED STANDARDS:

- NFPA 10, Standard for Portable Fire Extinguishers
- NFPA 101, Life Safety Code
- OSHA, 29 CFR 1926.352, Fire prevention
- OSHA, 29 CFR 1910.157, Portable Fire Extinguishers
- OSHA, 29 CFR 1910.38, Emergency Action Plans
- OSHA, 29 CFR 1910.39, Fire Prevention Plans
- International Code Council/International Fire Code, 2015