# 2023

# University of Central Florida Fire Plan



UCF Environmental Health and Safety and UCF Department of Emergency Management

> Current as of: February 28, 2023

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# <u>RECORD O</u>F CHANGES

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This plan is maintained by the University of Central Florida, Department of Emergency Management. Any concerns or questions can and should be forwarded specifically to:

Information and Planning Coordinator Department of Emergency Management Phone: (407) 823-0678

#### **Responsible Departments for this Plan:**

- Department of Emergency Management
- Environmental Health and Safety (EHS)

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This plan is included in the Comprehensive Emergency Management Plan (CEMP), General Edition.

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# **<u>CHAPTER 1</u>: INTRODUCTION**

- 1.1. The University of Central Florida (UCF) is committed to providing a fire-safe environment for its faculty, staff, students, and visitors; and to protecting its property through an effective fire prevention, protection, preparedness, and response program. The purpose of this Fire Plan is to assist the university community in working together to maintain an environment that reduces the risk of fire hazards, as well as increasing safety.
- 1.2. UCF works in cooperation with the Florida Division of State Fire Marshal to ensure compliance with the Florida Fire Prevention Code through fire safety plans review for all construction and renovations, and through ongoing facility inspections. UCF has established UCF Design and Construction Standards to enhance the level of safety provided in our facilities.
- 1.3. This Fire Plan provides detailed information on how to implement the requirements of the UCF's Fire Plan, and provides a template to create both building-specific and department-specific Fire Safety Plans. This plan addresses four major areas: fire emergency preparedness, fire emergency response, fire extinguishers, and fire safety training.

# <u>CHAPTER 2</u>: FIRE EMERGENCY PREPAREDNESS

# 2.1. Emergency Evacuation Plans

- 2.1.1. Each UCF-owned or -leased facility is subject to the UCF Evacuation Policy. Each Department Administrator and appropriate Building Liaison is responsible for developing, implementing, and updating building-specific departmental Emergency Evacuation Plans, in conjunction with the Emergency Manager and the Fire Safety Team.
- 2.1.2. When a fire is observed; smoke condition occurs; or a fire alarm is heard, or someone that may be unable to hear, but can visually observe strobe lights, all building occupants will proceed to the nearest exit or follow the direction of emergency responders. The fire alarm should be activated en route to the exit, if not already activated. Total building evacuation is required when fire, smoke, or an alarm is detected.
- 2.1.3. Personal items within easy reach, such as car keys and purses, should be gathered as individuals exit the facility. Certain departments may have additional minor duties that are *preferred* to be executed, where good judgment and safety allow, in the course of evacuation. These could include locking file cabinets on the way out of an office; shutting down experimental equipment while exiting a lab; or turning off gas appliances. Staff should never be advised to go to alternate floors or to reenter rooms when they are already near an exit.
- 2.1.4. After exiting the building, work groups, classes, and occupants should make every effort to convene at one of the designated muster points around the perimeter of the building for accountability. Designated meeting places should be a minimum of 200' away from the facility. Primary and alternate locations are to be chosen to allow for meeting upwind of any facility where hazardous vapors may be released.
- 2.1.5. An individual should be designated for each work group and department to account for all individuals in his or her area. This could be an instructor for a class, a supervisor for a department, or a lab manager for a work group. Upon exiting, evacuees should contact the individuals identified in their departmental plan.
- 2.1.6. Staff and responders should be notified of any experimental, automatic, or crucial processes which could be adversely affected if left unattended or subject to an abrupt loss of power. Special contingency plans will need to be developed by the department to address these concerns. This would include procedures for safely restarting equipment after the building is reoccupied. The Departmental Evacuation Plan should include a note for general awareness.
- 2.1.7. Employees are encouraged to familiarize themselves with all aspects of their work environments, including the locations of AEDs, fire extinguishers, primary and alternate exit paths, and emergency notification devices, such as fire alarms and pull stations.

2.1.8. Written Departmental Emergency Evacuation Plans are required for all individual departments. Copies of these plans will be available to employees for review and use. A template for creating an Emergency Evacuation Plan can be found on page 10 of this plan.

# DEPARTMENTAL EMERGENCY EVACUATION PLAN UNIVERSITY OF CENTRAL FLORIDA

This template should be used to develop the Departmental Emergency Evacuation Plan. Those responsible for maintaining this plan should identify general information about the facility, evacuation meeting points, and the personnel responsible for check-in during an evacuation. This plan should be reviewed and updated frequently to ensure that the information contained in it is accurate.

### **General Information:**

Facility Name and Building Number:	
Department, Class, or Workgroup:	
Approximate Number of Group Members:	
Note Here if any Known Persons with Disability (PWD) and see the Emergency Plan for PWD:	

In the event of an evacuation, occupants should meet at one of the locations designated below, in order of succession. Alternates are used when environmental conditions preclude assembly at the previous point.

Primary Designated Meeting Place:	
First Alternate:	
Second Alternate:	

In the event of an evacuation, the individuals below should be responsible for accounting for personnel. Evacuees should make every effort to check in with the designated individuals.

Primary Person:	
First Alternate:	
Second Alternate:	

In the event of an evacuation, the special departmental tasks below are *preferred* to be completed, only if good judgment and safety allow, as workspaces are evacuated. Also noted here are any considerations that need to be given to crucial processes:

# 2.2 Emergency Procedures for Individuals with Accessibility Needs

- 2.2.1. All building occupants should familiarize themselves with both primary and alternate routes of evacuation. Individuals with accessibility needs and mobility impairments are more at risk during an emergency situation and should take extra measures to familiarize themselves with the alternate exit options available.
- 2.2.2. On building levels with accessible exits, individuals with accessibility needs will evacuate with others persons, provided the accessible exits are not blocked.
- 2.2.3. On building levels above or below the accessible exits, or where exits are blocked, individuals with accessibility needs should proceed to the nearest *safe area* for refuge and wait for emergency personnel to evacuate them.
  - 2.2.3.1. A safe area is usually a stairwell or other separately enclosed space near an exit.
  - 2.2.3.2. Most stairwell landings are adequately sized to allow for individuals with accessibility needs to shelter in place without impeding the flow of pedestrian traffic.
  - 2.2.3.3. Where sufficient room is not available and an eminent risk is not present, it is suggested the individuals with accessibility needs wait immediately adjacent to the stair door and enter the stairwell when others have moved out of the way, or when danger becomes apparent.

# 2.2.3.4. If you have questions regarding potential safe areas in your facility, please contact the Department of Environmental Health and Safety.

- 2.2.4. In extreme emergencies, persons who can safely use stairs with assistance should request such assistance from others.
  - 2.2.4.1. Persons should only be moved or relocated with their permission.
  - 2.2.4.2. Persons with visual impairments should request to have a sighted guide help them.
  - 2.2.4.3. Persons with hearing impairments should request to be informed of any emergency so that the auditory emergency instructions can be given in a method they can understand.
- 2.2.5. Persons with impairments who require assistance from non-emergency services personnel need to be prepared to advise the lay person of the best way to provide help.
- 2.2.6. A suggested Buddy Plan includes assessing the potential for individuals with accessibility

- 2.2.6.1. The building liaison, department head, supervisor, or instructor should review and complete the Individual with Accessibility Needs Buddy Plan found on page 13 for applicability and implementation with the Departmental Emergency Evacuation Plan found on page 10.
- 2.2.6.2. Volunteer buddies will be requested to work in teams for each individual with accessibility needs. Several team volunteers may be needed, depending on the number of known individuals with accessibility needs in your area and the size of the facility.
- 2.2.6.3. Upon an alarm or evacuation order where an individual with accessibility needs is unable to evacuate, one buddy stays behind with the individual with accessibility needs at the safe area. The second buddy evacuates to the designated meeting place and informs responders of the individual with accessibility needs and his or her location.
- 2.2.6.4. Persons who have already exited a building are not to re-enter. If you were not able to reach an individual with accessibility needs, inform emergency responders immediately.
- 2.2.6.5. Where the Buddy Plan is implemented, copies of each plan must be provided to the Building Liaison and the Fire Safety Team.
- 2.2.6.6. Buddy Plans will be incorporated into evacuation drills for training and evaluation where possible.

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# INDIVIDUALS WITH ACCESSIBILITY NEEDS BUDDY PLAN UNIVERSITY OF CENTRAL FLORIDA

This optional template may be used to develop the Individuals with Accessibility Needs Buddy Plan. Those responsible for maintaining this plan should identify general information about the facility, safe areas in the building, and the contact information for those involved in the volunteer Buddy Plan program. This plan should be reviewed and updated frequently to ensure that the information contained in the plan is accurate.

BASIC INFORMATION	
Building, #:	Date:
Department:	Floor Level:
-	
Department Head or Supervisor:	Email:

#### SAFE AREAS

Describe the safe areas in the building:

VO	VOLUNTEER* BUDDIES		
	Name	Phone	Email
1			
2			
3			
4			
5			

\*Membership in the Buddy Program is voluntary. Individuals with accessibility needs are not required to self-identify.

# 2.3. Fire Drills

- 2.3.1. Fire drills are conducted to provide an opportunity for faculty, staff, students, and emergency responders to become familiar with the building fire safety features, to practice emergency procedures, and to ensure the efficient and safe use of exits. To ensure that this practice is adequate, drills will be arranged so that they simulate probable varying emergency conditions specific to the building.
- 2.3.2. Drills will be held during normal operational hours to provide experience opportunity for the largest number of participants.
- 2.3.3. Fire drills should be arranged with notice only to essential personnel to simulate an accurate response by building occupants.
- 2.3.4. Due to the transitory nature of classroom building occupants, it may not be possible for the building liaison to inform every instructor in advance. It is important that all faculty and staff are prepared to react promptly to an evacuation notice, regardless of location and planned class activities.
- 2.3.5. It is the intent during a drill that all classes evacuate and all laboratory operations shut down to a secured condition. It should be noted that there is a difference in urgency for a drill evacuation versus a true perceived emergency condition. In predetermined drill evacuations only, flexibility will be considered for special circumstances, such as live animal procedures, which need not end abruptly in a non-emergency condition. Such special circumstances will be noted on the drill report and the department staff verified to have a suitable contingency plan in place should a real event occur.
- 2.3.6. Fire drills should be conducted at a minimum frequency as outlined in the table below. Follow-up drills will be required were evacuation performance needs improvement.

Residence Halls, Apartments, and Dormitories	Once per semester
Facilities with laboratories or notable amounts of	Annually
hazardous materials, and where required by the AHJ.	
Newly occupied or majorly renovated facilities	Within 1 year of occupancy and
	thereafter on the schedule by
	building type
Daycares	Monthly
All others	Biannually, where practical

2.3.7. The Department of Environmental Health and Safety (EHS) will work with building liaisons to arrange an approved date and time for each facility's annual or biennial drill. Building liaisons will be responsible for communicating the necessary details to the appropriate facility occupants.

- 2.3.8. Facilities requiring more frequently occurring drills, such as healthcare, daycare, and residential facilities, will schedule and oversee their own events, with appropriate training and approval of Environmental Health and Safety nd the Department of Emergency Management. The recommended Fire Alarm and Drill Evacuation Report should be filled out and a copy provided to EHS for each event.
- 2.3.9. Evacuation times will vary with building size and the complexity of ongoing operations. Most successful drills can be completed in less than 20 minutes with minimal disruption to the ongoing activities. Drills are generally rated as follows:

<b>Evacuation Time</b>	Rating	Cooperation	
< 5 Minutes	Excellent	Prompt and orderly evacuation	
5-10 Minutes	Average	Minor objections to leaving	
> 10 Minutes	Needs Improvement	Notable delays and opposition	

2.3.10. All deficiencies identified during the drills must be promptly addressed. Environmental Health and Safety will follow up on the issues identified, and will report all Facilities Operations-related items to the Work Control Center.

#### FIRE ALARM AND DRILL EVACUATION REPORT UNIVERSITY OF CENTRAL FLORIDA

BASIC INFORMATION		
Building, #:	Date:	
Alarm and Evacuation Time Start:	Responders/Attendees:	
Time Complete:	Facilities Operations UCFPD	
Overall Evacuation Assessment:	EHS OCFR DEM Other:	
Excellent Average Needs Improvement	Weather Conditions:	

Items to Check During Alarms and Drills		
Item		Needs Follow Up Comment
Aloren dervices franctioned monorly?		(Additional Comment Space Below)
Alarm devices functioned properly?		
Voice announcement adequate where applicable?		
Corridors, stairs, exits and pathways clear of obstructions		
and exit doors unlocked and working properly?		
Exit signs and emergency lights working properly,		
especially in stairwells?		
Room doors closed behind exiting occupants?	[	
Fire extinguishers visible and available for use?		
Exiting occurred in a smooth and orderly fashion without		
crowding?		
Persons with Disabilities received adequate assistance?		
Occupants exited cooperatively?		
Occupants avoided using elevators?		
Occupants assembled at designated locations?		
Occupants did not re-enter the building until allowed?		
Was this a regularly scheduled drill? Yes If No, provi	de addi	tional details in comment area.

Were there any injuries reported from the drill or alarm event? No If Yes, detail in comment area.

Was there any property damage reported?	No If	Yes, detail in comment area.
---	-------	------------------------------

Approximate number of evacuation participants:

Comments and Follow-Up:

Follow-Up Actions Addressed by Initials\_\_\_\_\_

Date\_

STAFF INFORMATION				
Staff Member Reporting:				
Area Observed:				

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Title:		Phone Number:	
(	Copy of this report provide	d to Environmental Health and Safety	

# **<u>CHAPTER 3</u>: FIRE EMERGENCY RESPONSE**

#### 3.1. Fire Response Procedures

3.1.1. In case of a fire or a fire alarm, the following procedure is to be followed. Generally, the Rescue Alarm Contain Extinguish and Evacuate (RACE) procedure is a good basic action plan. Always consult and follow your Departmental Emergency Evacuation Plan.

#### **3.1.2.** IF YOU DISCOVER A FIRE OR SMOKE CONDITION: **RACE**

- 3.1.2.1. **RESCUE** any person in immediate danger.
- 3.1.2.2. Determine the nearest fire **ALARM** and pull it to alert everyone.
- 3.1.2.3. **CONTAIN** the fire by closing all doors, where possible. Turn off electric and gas equipment in your area as you evacuate, if possible.
- 3.1.2.4. EXTINGUISH a small fire using a fire extinguisher, if comfortable. EVACUATE using the nearest stair exit. Follow the exit signs. Report the incident by calling 911 from a safe location outside the structure. Report any discharged fire extinguishers and any first-hand information that you might have to the Environmental Health and Safety Fire Safety Team at 407-823-6300.

#### 3.1.3. IF YOU HEAR or SEE A FIRE ALARM SIGNAL or ANNOUNCEMENT:

- 3.1.3.1. Follow the emergency procedure for your building and area, if any.
- 3.1.3.2. Follow the announcements on the public address system or the instructions of emergency personnel.
- 3.1.3.3. Evacuate or stand by and stay alert as instructed on the public address system.
- 3.1.3.4. Follow the EXIT signs. Use stairs. Do not use elevators. Walk at a normal pace.
- 3.1.3.5. Wait outside in the designated assembly areas at least 200 feet or more away from the building, as instructed.
- 3.1.3.6. Re-enter the building only after authorized emergency personnel announce "All Clear."

#### 3.2. Procedure for Persons with Disabilities (PWD)

3.2.1. Each department should complete the "Persons with Disabilities Buddy Plan" form in this Guide to develop their specific evacuation strategy.

- 3.2.2. All occupants: report the presence of any PWD in the building to the fire department.
- 3.2.3. Designated buddies:
  - 3.2.3.1. With the PWD's permission, escort (do not carry or lift) the person to a safe area, and
    - 3.2.3.1.1. *Buddy #1*: accompany the person while waiting for help in or by the stairwell. Stay with the PWD *unless* there is an immediate danger.
    - 3.2.3.1.2. *Buddy #2:* report the location of the person to the fire department or other emergency responders, and be available to provide any relevant information.
  - 3.2.3.2. Do not evacuate vertically unless the person is able to ambulate, conditions warrant emergency action, and they have given you permission to assist them.
  - 3.2.3.3. Do not use the elevators unless assisted by the fire department.

# 3.3. Initiating Evacuation Using the Fire Alarm (Pull Box)

- 3.3.1. Fire alarm pull boxes or pull stations are typically red boxes that say, "FIRE," located at building exits and stairwell doors. In case of fire or smoke, pull the alarm down as indicated to activate the building fire alarm system. Note: areas with sensitive computer equipment are sometimes provided with additional pull stations for local suppression equipment. Take care not to activate any pull station labeled as "Clean Agent" unless you intend to do so. See the picture section for examples.
- 3.3.2. Upon detecting a potentially hazardous fire situation, use the fire alarm pull box promptly to minimize the loss of life and property due to fire. Once the alarm has been activated, contain, evacuate, and contact emergency responders by calling 911 from a safe location outside the structure. While UCF building fire alarms are remotely monitored by the UCF Police proprietary receiving station, calling 911 ensures responders have received the signal and allows them to obtain additional pertinent information.
- 3.3.3. Some pull boxes have Plexiglas covers which, when lifted, produce a local warning sound. Note that this is not a fire alarm sound. To activate the fire alarm throughout the building, you must pull the smaller inner pull box. (Again, take care not to activate any box labeled as, "Clean Agent", unless you intend to do so.)
- 3.3.4. Employees should familiarize themselves with the locations of at least two pull box locations in their area.
- 3.3.5. Pull boxes should be maintained free of obstructions and clearly visible at all times. Any fire alarm-related concerns should be reported to Facilities Operations.

# 3.4. Initiating Evacuation for Facilities without a Fire Alarm

- 3.4.1. In facilities without a fire alarm system, all work groups must have an established meeting place and accountability plan to ensure that all employees have exited the facility.
- 3.4.2. Upon detecting a potentially hazardous situation, notify all employees in the facility as calmly as possible of the need to evacuate and proceed to the nearest exit. An air horn or bell type sounding device may be useful, depending on your area arrangement. If a master switch for the lights is available, flicking the lights on and off as you exit can also help gain personnel's attention in the area.
- 3.4.3. A call list of office and mobile phones should be readily available and able to be picked up by staff as they exit, to assist further in contacting personnel after assembling at the designated meeting place.
- 3.4.4. Indicate the chosen options on your Departmental Emergency Evacuation Plan (see page 10 of this guide) and distribute to staff.

## 3.5. Fire Incident Response

- 3.5.1. In addition to the fire evacuation procedure, the following responses may be necessary:
  - 3.5.1.1. Fire extinguishment
    - 3.5.1.1.1. An extinguisher should only be used for small fires, such as ones that might occur in a wastepaper basket. A large, developed or spreading fire will be handled by the fire department.
  - 3.5.1.2. Burn Injury Response
    - 3.5.1.2.1 Burns can be caused by dry heat (like fire), wet heat (such as steam or hot liquids), radiation, friction, heated objects, the sun, electricity, or chemicals.
    - 3.5.1.2.2 The most important response action is to STOP the burning process. Remove the source of heat, if possible.
      - If clothing catches on fire, have the person **<u>STOP</u>**, **<u>DROP</u>**, **<u>AND</u> <u>ROLL</u>** to smother the flames.
      - Douse the person with water or guide him or her to a safety shower, where available.
      - Call 911.
      - Keep the person calm until help arrives.

- 3.5.1.2.3 Report all fires and injuries requiring medical response to the UCFPD. The responding Emergency Medical Services, who will be notified either by the University Police Dispatch or the responding Fire Department, will handle all incidents requiring emergency rescue or medical treatment. Anyone discovering such a need must report it immediately to **911**.
- 3.5.1.2.4 All work-related injuries, including minor injuries requiring emergency response, must be reported. Keep in mind that what may seem like a minor injury could develop into a larger problem requiring follow-up attention later. Please refer to the UCF Human Resources website for procedures:

#### Leave Administration - UCF Human Resources

- 3.5.1.2.5 See the Appendix for additional information on burns and first aid.
- 3.5.2. Fire or Smoke Incident Reporting
  - 3.5.2.1. Faculty, staff, students, and visitors on the University premises should immediately report all fire or smoke incidents, regardless of size or type, to the University Police Dispatch or 911 as appropriate. This notification must be made whether or not the fire has already been extinguished.
  - 3.5.2.2. The fire scene cannot be disturbed. This is to ensure that evidence critical to the incident investigation is not disturbed. The affected department will promptly notify EHS, Facilities Operations, or the University Police Department if there is a potential for further damage to property or injury to the occupants, if evidence is left on the fire scene. Where the department must act swiftly to protect valuable research or records from further damage, it should be made known to the University Police or EHS.
  - 3.5.2.3. The area of fire cannot be re-occupied until authorized emergency personnel announce, "All Clear."

# <u>CHAPTER 4</u>: FIRE EXTINGUISHERS

# 4.1. General Fire Extinguisher Information

- 4.1.1. Fire extinguishers are provided throughout all UCF buildings for use as required by the Florida Fire Prevention Code. EHS will ensure compliance with this requirement.
- 4.1.2. Research shows that fires can quickly grow out of control in three to five minutes. A fire extinguisher is your first response to fire fighting. An average extinguisher will discharge completely in less than one minute. It is important that you know at least two locations for extinguishers nearest to your work area and know how to use them effectively.
- 4.1.3. Be aware that the agent from most extinguishers is expelled under a slight pressure and with some noise. In some instances, it may be enough to disturb loose debris and can even spread the fire if you are not successful in extinguishing it.
- 4.1.4. Dry chemical extinguishers emit a fine powder that can appear smoky and obscure visibility, especially in small spaces. See the picture section for an example.

## 4.2. <u>Safety Precautions Before Using A Fire Extinguisher</u>

- 4.2.1. If you see fire or smoke, ALWAYS pull the building fire alarm first to ensure people are exiting the building, and someone has called 911.
- 4.2.2. Evaluate the area and make sure the fire is small and contained. Do not attempt to use a fire extinguisher if the fire is large or spreading, or of you do not know what is burning.
- 4.2.3. Make sure you have an unobstructed escape route. Stay low and try not to breathe in heated smoke and fumes.
- 4.2.4. Check the extinguisher for good condition. Do not try to use a fire extinguisher if the handle pin has been tampered with, the cylinder is damaged, or the pressure gauge pointer is in the "RECHARGE" zone.
- 4.2.5. Make sure you have the proper size and type of extinguisher for the fire at hand and that you are familiar with how to use it. If you do not know what is burning, leave fire fighting for emergency responders.
- 4.2.6. Proceed with the "PASS" method only if you are confident with your abilities (see page 22). Start from a safe distance of about 10' away and move toward the fire only if it appears the extinguishing agent is working to control the flames. If the fire cannot be controlled, evacuate immediately to safety.

### 4.3. <u>How to Use a Fire Extinguisher</u>

- 4.3.1. The proper use of a fire extinguisher is listed below:
- 4.3.2. Position yourself at a safe distance from the fire (e.g., ten feet when using an ABC-type unit, five to seven feet when using a CO2 unit).
- 4.3.3. Use the "PASS" Method:

Pull	Pull the pin: This unlocks the operating lever and allows you to discharge the extinguisher.
Aim	Aim low: Point the extinguisher nozzle, horn, or a hose at the base of the fire.
Squeeze	Squeeze and hold the handle to discharge the extinguishing agent without any interruption.
Sweep	Sweep slowly from side to side as you hold the handle squeezed.

- 4.3.4. Carefully move closer only if you see that the extinguishing agent is effective on the fire and the fire appears to be decreasing in size and intensity. Exit the building if the fire is not diminishing.
- 4.3.5. Watch the fire area until it has completely cooled down.
- 4.3.6. If the extinguisher is not empty, apply additional agent if the fire re-ignites. Exit the building if you are not able to extinguisher the fire.
- 4.3.7. Report the fire to the UCFPD and the discharged extinguisher to EHS. Once used, the extinguisher must be recharged.

PULL PIN	AIM AT BASE OF FIRE	SQUEEZE AND SWEEP SLOWLY FROM SIDE TO SIDE

# 4.4. <u>Types of Fire Extinguishers on UCF Campuses</u>

4.4.1. Most of the extinguishers on campus are the ABC dry chemical type. These are typically red cylinders with a small hose or nozzle and contain a dry chemical powder. The "A" covers ordinary combustibles such as trash, wood, and paper. The "B" covers flammable liquid fires. The "C" covers energized electrical equipment. A unit with all three (A-B-C) on it means that it can extinguish all three types of fires. It is important to remember that, for electrical fires, the equipment must be de-energized or the fire can reignite.



4.4.2. The second most common type of extinguisher on campus is the BC C02 unit. These units are also red cylinders but have a larger horn on the side in lieu of a hose. They cover only "B" and "C" type fires and use carbon dioxide gas instead of dry chemical powder. They are located in areas with sensitive equipment and at some fueling operations.



4.4.3. Kitchen areas are provided with "K" type extinguishers. These are usually a larger silver canister and are filled with a foam agent. They are intended to be used only after the kitchen hood suppression system has been activated.



4.4.4. Some laboratory work areas have separate "D" class units, in addition to the ABC above. The "D" unit is for heavy metal fires like magnesium or sodium. This unit is a very large yellow canister set on the floor or on a cart for easier movement. It has a long wand to spray the agent from a distance.



# 4.5 Fire Extinguisher Installation and Maintenance

- 4.5.1. Fire extinguishers in campus facilities are located as outlined by the applicable National Fire Protection Association (NFPA) codes and as approved by the State Fire Marshal.
- 4.5.2 Requests for additional units should be directed to EHS Fire Safety for review. Additional units will be provided only where existing area coverage does not meet code. New units required for special equipment (e.g., Ks and Ds) are funded by the department adding the new equipment.
- 4.5.3 Fire extinguishers are serviced annually by EHS Fire Safety, with an approved licensed contractor. Monthly checks should be conducted by a designee within the facility. The expenses for all auxiliaries and the services are billed by Finance and Accounting guidelines.
- 4.5.4 Vehicle units are only provided to DOT-required equipment. The equipment operator must check the unit monthly and return it annually for service or exchange.
- 4.5.5 Additional information is available at the EHS website:

https://ehs.ucf.edu/fire-extinguishers

# **<u>CHAPTER 5</u>: FIRE SAFETY TRAINING <u>AND</u> EDUCATION**

# 5.1. Fire Safety Guidelines

- 5.1.1. The Department of Environmental Health and Safety has established guidelines and procedures for a variety of activities with fire safety elements, such as the use of extension cords, pyrotechnic displays, outdoor burning, and cooking. Information on these and other helpful topics is available at the website: <a href="https://ehs.ucf.edu/fire-safety-guidelines">https://ehs.ucf.edu/fire-safety-guidelines</a>
- 5.1.2. Campus events are reviewed using the SAFE form process for general concerns including fire and life safety. Event set-ups and requests are not approved until they meet the minimum criteria outlined by staff review.
- 5.1.3. The purchasing, installation, and use of curtains, furnishings, and tents are reviewed for fire safety compliance through the Purchasing and Facilities Planning departments or the SAFE form process. If you plan to purchase or use these items, be sure to verify they are acceptable in advance to avoid delays in purchasing or use.
- 5.1.4. Open flames, candles and incense are not approved for use in state buildings such as office, classroom, and residential facilities. The use of electric air fresheners is discouraged. Any items used must be listed and approved by and Environmental Health Safety.
- 5.1.5. Cooking in campus facilities is only approved in designated kitchen areas. Appliances for sautéing and frying may not be brought from home for use in office spaces. All cooking and warming must be constantly attended.
- 5.1.6. If you have any questions on any of the topics above, please contact the Fire Safety Team at 407-823-6300.

# 5.2. Fire Extinguisher Monthly Quick Checks

- 5.2.1. Fire extinguishers in your area should be checked monthly to ensure proper operating condition. A quick PowerPoint presentation of how to do these quick checks is available at the Environmental Health and Safety website:\_
- 5.2.2. https://ehs.ucf.edu/fire-extinguishers
- 5.2.3. Report any fire safety extinguisher problems or concerns to the Fire Safety Team at 407-823-6300

# 5.3. Fire Extinguisher Training

- 5.3.1. Fire extinguisher training classes are offered periodically and upon request. Departmental groups of at least eight verified participants may request a session locally. A training simulator with low environmental impact is available to facilitate training sessions at more convenient locations closer to campus buildings.
- 5.3.2. Request fire extinguisher training from the Fire Safety Team at 407-823-6300.

# 5.4. Miscellaneous Training Topics

5.4.1. Training and guidance on specific topics, such as Cooking, Shop Safety, Developing Exiting Plans, etc., are available upon request. Please contact the Fire Safety Team at 407-823-6300 for assistance.

# 5.5 Fire Safety Reference Pictures

5.5.1. Typical fire extinguishers from Left to Right: ABC 10#, ABC 5#, CO2 20#, K Class, and D Class



5.5.2. A manual pull station, with and without Plexiglas cover



5.5.3. A Plexiglas cover on a Clean Agent Manual Pull (not to be confused with a regular fire alarm pull station)



5.5.4. An example of fire extinguisher training with the simulator unit





5.5.5. An example of what a discharged ABC dry chemical unit looks like

# APPENDIX

#### Additional Information on Burns and First Aid

There are three levels of burns:

First-degree burns affect only the outer layer of the skin.



**Second-degree** (partial thickness) burns affect both the outer and underlying layer of skin. They cause pain, redness, swelling, and blistering.



**Third-degree** (full thickness) burns extend into deeper tissues. They cause white or blackened, charred skin that may be numb.

And the second s	F Third Degree Burn Damage extends deeper into tissues (epidermis, dermis and hypodermis) causing extensive tissue destruction. The skin may feel numb.	ull thickness burn with tissue destruction
	may roor numo.	

### **Symptoms**

Common Symptoms for First, Second, and Third Degree Burns

Red skin

Peeling skin

Pain (The degree of pain is not related to the severity of the burn. The most serious burns can be painless.)

#### *Additional Symptoms Common to Second and Third Degree Burns* Blisters

Shock (Watch for pale and clammy skin, weakness, bluish lips and fingernails, and a drop in alertness.) Swelling White or charred skin

#### **First Aid for Minor Burns**

- Always ask for consent before assisting.
- If the skin is **unbroken**, run cool water over the area of the burn or soak it in a cool water bath (not ice water). Keep the area submerged for at least five to ten minutes. A clean, cold, wet towel will also help reduce pain. **DO NOT APPLY ICE DIRECTLY TO SKIN!**
- Calm and reassure the person.
- After flushing or soaking, cover the burn with a dry, sterile bandage or clean dressing.
- Protect the burn from pressure and friction.
- Minor burns will usually heal without further treatment. However, if a second-degree burn covers an area more than 2 to 3 inches in diameter, or if it is located on the hands, feet, face, groin, buttocks, or a major joint, treat the burn as a major burn.

### First Aid for Major Burns

- Do NOT apply ointment, butter, ice, medications, cream, oil spray, or any household remedy to a severe burn.
- Do NOT breathe, blow, or cough on the burn.
- Do NOT disturb blistered or dead skin.
- Do NOT remove clothing that is stuck to the skin.
- Do NOT give the person anything by mouth, if there is a severe burn.
- Do NOT immerse a severe burn in cold water. This can cause shock.
- Do NOT place a pillow under the person's head if there are airways burn. This can close the airways.

### Call 911 if:

- The burn is extensive (the size of your palm or larger);
- The burn is severe (second or third degree);
- You aren't sure how serious it is;
- The burn is caused by chemicals or electricity;
- The person shows signs of shock;
- The person inhaled smoke;
- There are other symptoms associated with the burns.