

ANNEX 7: FIRE

General Information

Structure fires (fires involving the structural components of a building) can be devastating and catastrophic life events. Fire events can range from minor smoke events (e.g., burning food) to complete burning and destruction of property. A structure fire can create a very toxic environment. The composition of smoke depends on the nature of the burning fuel (source) and the conditions of combustion. All smoke contains carbon monoxide, carbon dioxide, and particulate matter (char, ash, soot). Structure fires typically involve the burning of plastics, synthetic materials, electronics, and other building materials, which can produce a wide range of organic chemicals and oxygenated compounds. Inorganic chemicals, such as asbestos and metals, can also be components of smoke released during a fire event resulting from the burning materials. Exposure to smoke can cause acute and chronic health effects. Smoke is irritating to the eyes, nose, and throat, and its odor may be nauseating.

According to the National Fire Protection Association, most fire deaths are the result of smoke inhalation rather than burns. Smoke inhalation is the most common cause of deaths involving fires. Symptoms of smoke inhalation range from coughing and vomiting to nausea, sleepiness, and confusion. If you notice a fire victim has difficulty breathing, singed nostril hair, and burns to their nose, mouth or face, seek medical attention for them. A fully developed indoor fire can reach or exceed temperatures of 1100 degrees Fahrenheit. Even one breath of this very hot air can be lethal. Inhaling superheated gases can burn your respiratory tract whether or not the gases present are toxic. Those who suffer burns are at an even greater risk as burn victims often have injuries to their lungs from inhaling hot smoke.

Your ability to get out of the building during a fire depends on advance warning from smoke alarms and advance planning. Fire can spread rapidly through a building, leaving you as little as one or two minutes to escape safely once the smoke/fire alarm sounds. A closed door may slow the spread of smoke, heat, and fire. Every person that frequents the Helena College campuses should identify all possible exits and escape routes. Primary and secondary assembly locations have been pre-designated for each of the two campus locations. Once you've exited the building, stay out! Under no circumstances should you ever go back into a burning building. If someone is missing, inform the fire department and the Executive Director of Operations immediately.

Designated Assembly Locations

Donaldson Campus:

- Primary Location: Football Field
- Alternate Location: East Parking Lot

Airport Campus:

- Primary Location: South end of the Parking Lot
- Alternate Location: North end of the gravel lot outside the fence

Four Stages of a Fire:

1. **Incipient Stage:** (Also known as Ignition): A fire starts when heat, oxygen, and a fuel source create ignition. The beginning stage of a fire is the easiest to extinguish or control.
2. **Growth Stage:** The surrounding area and amount of combustible material affects the speed at which the fire grows during this phase. Temperatures rise, and a defined layer of smoke above the flames appears.
3. **Fully Developed Stage:** After flashover occurs, the fire is in the fully developed stage when the temperature reaches its highest point. The fire has consumed all combustible materials in its path and presents a dense thick smoke that limits visibility.
4. **Decay Stage:** The decay stage is the final and often the longest stage of a fire. The flames decrease in size and the heat of the fire begins to drop. The fire basically smolders burning smaller fuel remnants.

Small Fires

Small fires are defined as one no larger than an office sized garbage can.

Class of Fire Extinguishers

Most extinguishers on Helena College campuses are **Class "ABC Combined" Dry Chemical Extinguishers**", which can be used on any types of fire except combustible metals.

DO YOU KNOW THE DIFFERENT TYPES OF FIRES?				
Not all fires are the same. Per NFPA 10, fires burning may be classified into one or more of the following fire classes and your fire protection specialist will select the right fire extinguisher size and agent for the hazard.				
CLASS	SYMBOL	PICTOGRAM	MATERIALS	EXAMPLES
A	A		Ordinary combustible materials	Wood, paper, cloth, rubber, and many plastics
B	B		Flammable liquids and gases	Gasoline, petroleum greases, tars, oils, oil-based paints, solvents, alcohols, propane, and butane
C	C		energized electrical equipment	Computers, servers, motors, transformers, and appliances
D	D		Combustible metals	Magnesium, titanium, zirconium, sodium, lithium, and potassium
K	K		Cooking oils and greases	Animal and vegetable fats

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FIRE EQUIPMENT MANUFACTURERS ASSOCIATION
Setting Lines, Protecting People



Instructions for Fire Extinguisher Use

Always check the type of extinguisher before using.



30 Minute/3 Hour/3 Day Response

Small Fires

30 Minute Response

Small Fires

1. Check the type of extinguisher before classification usage and instructions
2. Pull the pin
3. Stand approximately 10 feet back, aim the nozzle at the base of the fire
4. Squeeze lever as you sweep the target from side to side horizontally

If the fire is not controlled immediately with the fire extinguisher;

1. Exit the immediate area of the fire
 - a. Pull the fire alarm as you exit the building by quickest/safest means.
 - b. Fire alarms are generally found near all exits, elevators, and ends of hallways.
 - c. Proceed to the pre-designated assembly location.
 - d. **Call 911** and report the size and location of the fire to first responders.
 - e. If you suspect someone is trapped, report their location to fire department personnel and to the Executive Director of Operations by dialing 617-446-3691.
 - f. Once the fire has been extinguished, it must be reported to the physical plant (447-6935) for inspection and proper removal of burned or contaminated materials, and replacement of the fire extinguisher.

Large Fires

- Activation Mode:
 - Fire Alarm
 - Regroup Emergency Alert Notification System
 - In-Person

Action Steps

Follow "Evacuation Procedures" immediately:

1. Pull the fire alarm if not already activated to alert others.
2. If time permits, shut down any hazardous equipment or processes.
3. Close office and classroom doors. Do not use elevators.
4. Help those with special needs, if able. If not able, reassure them that you will send help.
5. Sweepers will check all offices, classrooms, bathrooms etc. if safe to do so.
6. Dial 911, when safe to do so.

7. Provide information about the emergency and its location.
8. Provide information about any persons that you believe were unable to evacuate.
9. Once evacuated, move away from the building. Respond and stage at assemble locations.

Faculty Members

1. Follow "Evacuation Procedures"
2. Keep yourself and students calm
3. Start accounting for all students in your command and control
4. Communicate with your supervisor:
 - a. Airport Personnel: Contact Executive Director of Career Technical Education by dialing (208) 305-1042.
 - b. Donaldson Campus: Contact Executive Director of General Education by dialing (406) 438-1402.
5. Remain at the assembly location until advised otherwise.

Staff Members

1. Follow "Evacuation Procedures"
2. Keep yourself and others calm
3. Start accounting for all staff members under your command and control
4. Communicate with your supervisor, contact Executive Director of Operations @ (617) 446-3691.
5. Remain at the assembly location until advised otherwise.

Executive Directors

1. Follow Evacuation Procedures
2. Keep yourself and others calm.
3. Start accounting for all faculty/staff members under your command and control
4. Communicate with Executive Director of Operations @ (617) 446-3691.
5. Remain at the assembly location until advised otherwise.

Executive Director of Operations

- 1) Follow Evacuation Procedures.
- 2) Keep yourself and others calm.
- 3) Start accounting for staff members under your command and control.
- 4) Start accounting for faculty members under other Executive Directors command and control.
- 5) Assume Operation Command
- 6) Ensure the First Alert Group, including the Dean/CEO, are made aware of the situation, via text.
- 7) Identify a safe location for a field command post or,

- 8) Identify the fire fighter who has assumed incident command
- 9) Communicate with fire personnel;
 - a) Any information you have about the size, cause, and location of the fire.
 - b) Any information or suspicion of person(s) that may still be inside the building.
- 10) Consider notifying the Emergency Management Team that a response may be necessary.

3-Hour Response (Stabilization)

Faculty/Staff Members

- If fire or smoke remains, or fire apparatus is still actively fighting the fire, do not re-enter the building.
- Consider releasing students after verifying they are on your "Accountability List".
- Consider weather conditions.
- The (Airport or Donaldson) campus not experiencing the fire can be considered as an alternative indoor assembly location if the need arises.
- Communicate decisions to Executive Director of Operations

Executive Director of Operations

- Consider activating the Emergency Management Team.
- Consider activating the Emergency Operations Center at campus opposite of fire.
- Continue with outgoing communications;
 - Helena College Community (Students, Faculty, Staff).
 - Greater Helena Community (Media).
 - Nearby Schools (Helena High, Bryant Elementary).
 - OCHE and UM-Missoula President.
- Consider activating Emergency Support Functions ESF's; #1, 2, 4, 5, 11, 12.
- Consider Academic schedule for both campus locations.
- Start contact efforts for any unaccounted individuals (staff members, faculty members, students, or guests).
- Continue to protect/secure area.
- Support Fire Department Personnel.
- Ensure Northwestern Energy has been contacted and on scene.
- Start Planning efforts for the next couple of days.

3-Day Response (Recovery)

Emergency Management Team

- 1) Continue to work with Fire Department Personnel, Fire Marshal, Fire Investigators
- 2) Work with Human Resources
- 3) Ongoing communications;
 - a) Helena College Community (Students, Faculty, Staff).
 - b) Greater Helena Community (Media).
 - c) OCHE and UM-Missoula President.
- 4) Work with Academic Advisory Unit
- 5) Work with Engineers/Building Inspectors/Insurance Adjusters/Investigators
- 6) Consider Business Continuity Plan