Fire Safety Handbook

CREIGHTON UNIVERSITY

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Senior Director, Public Safety

Fire safety on a university campus presents a unique set of challenges, ranging from high-occupancy residential facilities to well-attended public academic and athletic events to research laboratories containing a variety of hazardous materials.

We prepared this handbook as a resource for the Creighton community with a focus on fire prevention, particularly in our residence halls. Please take time to review this handbook and learn what you can do to keep our campus safe for all who live, learn, work and play here.

Pete S. Andrews, MSSM
Emergency Manager

Creighton University takes the safety of our students, faculty, employees and visitors very seriously. To that end, the University has hired an emergency manager to help develop operational plans to cover a wide range of emergency situations, training staff members on safety best practices and the development of partnerships with the Omaha Fire and Police Departments to ensure their familiarity of the campus.

It is my hope that you use the information contained in this document to help keep yourself and others as safe as possible. As the emergency manager, I bring 24 years of fire and emergency operations experience from the Omaha Fire Department to Creighton. Through increased awareness and training, we hope to make your experience here fulfilling, enjoyable and enriching.

Fire Safety Preparedness

Learn the egress routes

Often, the new semester may have classes at new locations that are unfamiliar to you. Before the first class, become familiar with multiple routes of egress.

Faculty: At the first class meeting, announce egress routes from the floor and from the building, as well as what is expected when a fire alarm is activated.

Pull the nearest fire alarm if you suspect or discover a fire.

Call Public Safety

- From a University phone, dial 2911; from a cell phone, dial 402.280.2911.
- Provide the location of the smoke or fire, including building, floor, and/or room number, and your contact info.
- Do not attempt to fight the fire.

Evacuate

- Upon hearing the alarm, faculty, staff, visitors and students must exit the building using the nearest exit.
- Follow the evacuation chart posted in every elevator lobby.
- Stay at least 100 feet away from the building.
- Close all doors and windows to prevent the spread of fire and smoke and leave the lights on.
- Proceed quickly and calmly to the nearest stairway exit.
- Never use an elevator—loss of power will trap you inside.
- Keep low to the floor to avoid smoke and toxic gases.

If you are trapped

- Do not panic. If a window is available, place a sheet or towel outside the window for the rescue crews to see your location.
- If there is no window, stay near the floor where the air will be less toxic. Shout at regular intervals to alert emergency crews of your location. Stay calm, try not to panic and remain on the phone with Public Safety or 911.

Re-entry

- Please do not re-enter a building until the “all clear” has been given by Public Safety or the Omaha Fire Department.

Persons needing assistance

- If you have mobility limitations and need assistance during a fire emergency on campus, contact Public Safety at 402.280.2911.
- If you are not in a Creighton owned or operated building, request assistance, if available, from someone nearby. Move to a location near the fire stairway with an exterior window. If the fire is on that floor, move into a stairway. Request the person assisting you to notify fire personnel of your location, or if you are alone, call 911 to inform the Omaha Fire Department of your location in the building. The Omaha Fire Department will evacuate you upon their arrival.
- If you are assisting someone with mobility limitations on campus, assess if the person can safely remain in the area or must be relocated to an area of refuge or a room with an exterior window and a telephone. After determining the best course of action, immediately contact Public Safety and provide the exact location of the person. If a telephone is not readily available, go to the building entrance and notify the first responders of the exact location of the person. Public Safety will inform the Omaha Fire Department of the location and determine if an evacuation is warranted. Only the Fire Department should attempt to evacuate persons requiring assistance.

Fire Safety in Student Housing Facilities

Fire prevention in student living facilities is critically important. Of the approximately 3,800 campus housing fires that occur in the United States each year, the majority (88%) are cooking fires. Other causes include overloaded power strips, candles and space heaters.

From January 2000 to May 2015, there were 85 fatal fires in dormitories, fraternities, sororities and off-campus housing in the U.S., resulting in 118 fatalities—an average of approximately seven per school year.

- 94% of fatal campus fires occurred off-campus.
- Smoking (29%) was the leading cause of fatal campus fires.
- Alcohol was a factor in 76% of fatal campus fires.
- Smoke alarms were either missing or tampered with (disconnected or battery removed) in 58% of fatal campus fires.
- Fire sprinklers were not present in any of the 85 fatal campus fires.
- 70% of fatal campus fires occurred on the weekend (Friday, Saturday and Sunday).
- 67% of the victims were males.
- 73% of the fatal fires occurred between midnight and 6 a.m.

These statistics highlight the potential dangers, but also show that through awareness and training, we can become safer.

Fire drills

A minimum of two announced and/or unannounced fire drills are held in each hall during the year with the assistance of the Omaha Fire Department.

Student housing fire safety policies

Smoking and tobacco use (including the use of e-cigarettes or vaporizers) are prohibited on campus, including the residence halls. Only approved electric appliances with the Underwriters Laboratory seal may be used.
Small appliances with exposed heating elements are strictly prohibited and will be confiscated.

For a complete list of approved items, refer to the Housing Agreement.

Cooking in student housing facilities

- Cooking within residential units is allowed only in our apartment communities: Davis, Heider, Kenefick and Opus.
- Cooking is NOT allowed in personal rooms in our traditional style residence halls. Cooking is allowed in the public kitchens in the traditional style residence halls on provided appliances.
- **While cooking, residents must remain present and attentive.** Most cooking fires in residence halls occur due to unattended cooking.
- No open-coiled appliances are approved for use in residence hall rooms.
- **Never throw water on a grease fire.** Water tossed into grease will cause it to splatter, spread and likely erupt into a larger fire. Instead, carefully turn off the heat source and place a lid over the skillet/pot to contain the fire, if possible. Then exit the room, close the door to prevent spreading the fire, activate the nearest fire alarm pull-station and exit the building.

Fire safety measures in student housing facilities

	Number of Beds	Fire Alarm System	Make and Model	Sprinkler System
Davis Square	260	GamewellFCI	E3 Series	Wet with backflow
Deglman Hall	160	Simplex	4020	Wet with backflow
Gallagher Hall	195	GamewellFCI	7100 Series	None
Heider Hall	200	GamewellFCI	7100 Series	Wet and dry with backflow
Kenefick Hall	200	GamewellFCI	7100 Series	Wet and dry with backflow
Kiewit Hall	486	IPF Series Intelligent Fire Control	AsBuilt	Wet with backflow
McGloin Hall	274	Simplex	4020	Wet with backflow
Opus Hall	283	GamewellFCI	E3 Series	Wet with backflow
Swanson Hall	457	IPF Series Intelligent Fire Control	AsBuilt	Wet with backflow

All residence halls have:

- Smoke detectors
- Whole building fire alarms
- Strobe lights
- Manual pull stations
- Evacuation plans and placards
- Two annual fire drills

Procedures for student housing evacuation and training programs provided to the students and employees

Residents are directed to evacuate the residence hall any time the building fire alarm sounds. Students who are or become mobility impaired are asked to notify their resident director, so they can receive additional emergency procedure information and instructions. The front desk of each residence hall maintains a list of residents who have mobility, vision or hearing impairment, who are susceptible to seizures due to sensitivity to flashing lights, or who have other self-reported conditions that may require assistance during evacuation. This list is provided to emergency responders in the event of an evacuation.

In the event of fire or smoke, students and employees should follow these procedures:

- If flame or smoke is detected, activate a fire alarm pull station.
- Evacuate the building.
- Go to the nearest exit.
- Do NOT use the elevator.
- Keep low to the floor if smoke is present.
- Contact Public Safety at 402.280.2911 and provide all information requested.
- Once outside, keep away from the building and listen for information about where to gather in the event that a census of building occupants is needed.
- Do not re-enter until an all clear is announced by authorized staff or Omaha Fire Department personnel.

When evacuation is not possible:

- As you leave your room to enter a hallway or stairwell, feel the door knob before opening your door.
- If the knob is hot, do not open the door. Remain in the room.
- If heat or heavy smoke prevents your evacuation, close the door and remain in your room. Seal the door with wet towels. Hang a white towel or sheet out the window to attract attention.
- Do not leave the window open all the way.
- Call Public Safety at 402.280.2911 to report your status.
- Wait for help to arrive.

Fire safety education and training

- Resident advisors receive general fire safety and fire extinguisher training during fall training. Residence hall staff receive orientation of their roles during a fire or fire drill. Additional fire safety training is offered to students and employees at campus events, such as Wellfest.

- Fire safety awareness and prevention messages are published in *Creighton Today,* the Student Leadership and Involvement Center newsletter, and social media during Fire Prevention Month each October.

Fire reporting

Any fires on campus should be immediately reported to Public Safety Dispatch at 402.280.2911, *even if it has been extinguished.*

Future fire safety initiatives

Creighton University continually strives to improve campus fire safety. All new building construction and renovations are completed in accordance with applicable fire codes. Opportunities for improvements in building fire alarm systems and fire safety improvements are routinely considered for existing structures. The University does not intend to install a sprinkler system in Gallagher Hall because it is scheduled for demolition in 2022 and will be replaced by a new residence hall. The new residence hall will include smoke and heat detectors, sprinkler system and a voice evacuation fire panel.

Fire Science

Fire is a chemical reaction involving rapid oxidation or burning of a fuel. It needs three elements to occur:

FUEL – Fuel can be any combustible material: solid, liquid or gas. Most solids and liquids become a vapor or gas before they will burn.

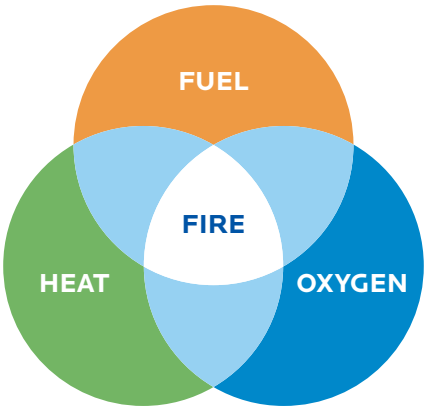
OXYGEN – The air we breathe is about 21% oxygen. Fire only needs an atmosphere with at least 16% oxygen to sustain burning.

HEAT – Heat is the energy necessary to increase the temperature of the fuel to a point where sufficient vapors are given off for ignition to occur.

Chemical chain reaction

A chain reaction can occur when the three elements of fire are present in the proper conditions and proportions. Fire occurs when this rapid oxidation, or burning takes place.

Take any one of these factors away, and the fire cannot occur or will be extinguished if it was already burning.



Fire Classification

Class A

Fires involving ordinary combustible materials, such as paper, wood and textile fibers, where a cooling, blanketing or wetting extinguishing agent is needed.

Class B

Fires involving flammable liquids such as gasoline, thinners, oil-based paints and greases. Extinguishers for this type of fire include carbon dioxide, dry chemical and halogenated agent types.

Class C

Fires involving energized electrical equipment, where a non-conducting gaseous clean agent or smothering agent is needed. The most common type of extinguisher for this class is a carbon dioxide extinguisher.

Class K

Fires involving commercial cooking appliances with vegetable oils, animal oils or fats at high temperatures. A wet potassium acetate, low pH-based agent is used for this class of fire.

Fire Prevention

Class A — Ordinary combustibles:

- Keep storage and working areas free of trash and ignition sources.
- Place oily rags in covered containers.

Class B — Flammable liquids or gases:

- Don't refuel gasoline-powered equipment in a confined space, especially in the presence of an open flame such as a furnace or water heater.
- Don't refuel gasoline powered equipment while it's hot.
- Keep flammable liquids stored in tightly closed, self-closing or spill-proof containers. Pour from storage drums only what you'll need.
- Store flammable liquids away from spark-producing sources.
- Use only in well-ventilated areas.

Class C — Electrical equipment:

- Look for old wiring, worn insulation and broken electrical fittings. Report any hazardous condition to your supervisor or resident advisor.
- Keep motors clean and in working order to prevent them from overheating.
- Utility lights and lamps should always have some type of wire guard or lamp shade. Heat from an uncovered light bulb can easily ignite ordinary combustibles.
- Don't misuse fuses, never install a fuse rated higher than specified for the circuit.
- Investigate all appliance or electrical equipment odors.
- Unusual odors can be the first sign of fire.
- Don't overload wall outlets. No more than two plugs per two outlets.

Class K — Commercial cooking extinguishers:

- Install an automatic fire-suppression system in the kitchen and have it professionally inspected semiannually.
- Wire the exhaust fan to turn on automatically when cooking appliances are turned on. Fire suppression systems are designed to automatically activate when a system detector reaches a specified temperature. Without the exhaust fan running, heat builds up, sets off these detectors, and discharges the system.
- Regularly inspect cooking equipment to ensure it remains clean and well maintained.
- Have the exhaust system inspected for grease buildup quarterly.
- Conduct monthly training on the use of the appropriate fire extinguisher.
- **Never throw water on a grease fire.** Water tossed into grease will cause grease to splatter, spread and likely erupt into a larger fire.

Portable Fire Extinguishers

Every portable fire extinguisher displays the rating on the faceplate, indicating the class of fire on which it is designed to be effective. Some extinguishers may be marked with multiple ratings such as AB, BC or ABC. The majority of extinguishers available at the University are ABC. These can be used on all types of fires except combustible metal fires.

Class A extinguishers

Are effective on ordinary combustibles. The extinguisher cools the temperature of the burning material below its ignition temperature. These extinguishers may utilize water, foam or multi-purpose dry chemical agents.

Class B extinguishers

Are effective on flammable liquids or gases. Class B extinguishers may come in several types including foam, carbon dioxide, ordinary dry chemical, multi-purpose dry chemical, Halon or Halon replacements. This class of extinguisher stops a fire by removing the oxygen (smothering), preventing the vapors from reaching the ignition source or inhibiting the chemical chain reaction.

Class C extinguishers

Are used specifically on fires involving energized electrical equipment. Extinguishing agents may be carbon dioxide, ordinary dry chemical, multi-purpose dry chemical, Halon or Halon replacements. Carbon dioxide, Halon and Halon replacements do not leave a residue and may be more desirable for use on computers and other sensitive electrical equipment. Never use water or other electrically conductive extinguishing agents on energized electrical equipment.

Class ABC extinguishers

Are dry chemical fire extinguishers used to handle all three classes of fire; Class A for trash, wood and paper, Class B for liquids and gases, and Class C for energized electrical equipment.

Class D extinguishers

Are used to extinguish combustible metals with powdered agents specifically designed for the material involved. In most cases the agent absorbs the heat from the burning material, cooling it below its ignition temperature.

Class K extinguishers

Are used in commercial kitchens and specifically designed to extinguish grease fires. Class K fire extinguishers are only intended to be used after the activation of a built-in hood suppression system.

Operating a Portable Fire Extinguisher

A portable fire extinguisher should only be used in the early stages of a fire and only when it is safe to do so. If the fire is too large, or it is spreading and threatening to block your path of escape, leave the area immediately. If necessary, do not hesitate to use the extinguisher to clear an escape path. Always fight a fire with your back to your escape route. You should know how to use an extinguisher properly.

Use the PASS Method:

P Pull the pin.

A Aim the extinguisher at the base of the flames.

S Squeeze the trigger while holding the extinguisher upright.

S Sweep the extinguisher from side to side, covering the area of the fire with extinguishing agent.

Weather permitting, live fire training can be conducted upon request and will be presented throughout the campus during the temperate months.

Holiday Decorations

Christmas trees

- Natural decorations cannot be used in residence halls.
- If departments choose to use natural trees, regularly check your tree for fresh, green needles. Trees that have dried out over several weeks burn faster than fresher, well-watered trees. Remember to keep your tree watered at all times.
- Keep your tree at least 3 feet from fireplaces, radiators, space heaters, heating vents and other sources of heat.
- Don't place the tree where it blocks an exit.
- All holiday decorations must be removed before Christmas break.
- Artificial trees must be flame retardant.

Lighting

- Look for the UL Mark on light strings, electrical decorations and extension cords. The UL Mark means that UL engineers have tested representative samples of the product for foreseeable safety hazards such as fire and electrical shock.
- Carefully inspect each electrical decoration—new or old—before plugging it in. Cracked sockets, frayed, bare or loose wires can cause a serious electric shock or start a fire. Replace damaged items with new, UL listed decorations.
- Don't use staples or nails to hang light strings. Instead, purchase plastic hooks or clips designed for hanging.
- Don't overload extension cords by plugging more than three light strands into the same outlet.
- Ensure decorations used are flame retardant and are placed safely on the tree away from the lights.

Other decorations

- Fire retardant foil decorations and fire resistant paper decorations are available from suppliers and should be used for all events. Basic paper trimmings and cotton wool are extremely flammable and should not be used for decorations unless treated with a flame retardant/spray solution.
- Decorations should not obstruct any exit routes, fire notices, fire alarm call points, fire sprinklers or firefighting equipment.
- Decorations may not be hung from sprinkler heads or sprinkler pipes.
- Door wraps may not cover more than 25% of any door.

Fire Safety Checklist for Students

1. Make sure your sleeping room has working smoke detectors.
2. Plan to survive ... know two ways out from your room.
3. Be mindful of cooking while consuming alcohol (if you are age). Cooking while under the influence can increase the chance you'll make a mistake or start a fire.
4. Buy flameless candles. They come in all sizes, colors and scents.
5. Make sure you know and practice a fire escape plan.
6. Talk with your roommates and determine a safe place to meet outside in case of a fire.
7. Clear exits/hallways/stairs. In case of a fire, you'll need to leave quickly.
8. Clean the dryer lint trap before and after each use. Help keep dryers safe.
9. Leave quickly when the fire/smoke alarm sounds. Spending time retrieving items increases your chances of being trapped. Leave everything and GO.
10. Friends keep friends safe from fire-related hazards.
11. Share this checklist ... pass fire safety tips along to friends!

Fire Safety Outreach provided by:
The Center for Campus Fire Safety Student Committee: *campusfiresafety.org*
The National Fire Protection Association: *nfpa.org*

For more information:

CreightonDPS@creighton.edu
402.280.2104

creighton.edu/publicsafety