New York University

Fire Safety Handbook
For Faculty, Staff and Teaching Assistants

Public Safety Emergency Numbers
Washington Square - 212 998-2222
Dental Center – 212 998-9828
IFA - 212 772-5808
School of Engineering - 718 260-3537
Environmental Health & Safety 212 998-1450
Fire/Police - 911
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This Fire Safety Handbook was prepared by the New York University Environmental Health and Safety Department
10 Astor Pl.
New York, NY 10012   Fall 2014 Edition
Forward

The Fire Safety Handbook has been developed by Environmental Health & Safety to provide New York University faculty and staff with a ready source of information in regard to a fire emergency. The procedures set forth in this handbook have been designed for the protection of life and the minimization of property loss due to fire. However, a plan of action is only as effective as the people who carry out the procedures. The actions taken during the first minutes of a fire emergency are crucial to averting disaster. Therefore, all NYU Faculty members, Staff and teaching assistants are encouraged to review the Handbook and become familiar with the information that applies to their classroom, office and/or laboratory. In addition, all faculty and staff are asked to actively participate in fire drills, recognition of fire hazards, removal of such hazards whenever possible, and reporting of hazards when necessary. At the start of each new semester NYU Faculty members, Staff and teaching assistants are requested to remind students of fire exits locations and to exit the building using the staircases when an alarm is sounded.
Fire Alarm Policy

It is the policy of the University that when smoke or fire is discovered, the fire alarm must be sounded. Because of the potential for underestimating the seriousness of a fire condition, there are no exceptions to this policy.

When the building fire alarm sounds, every Faculty member, Staff and Student is expected to evacuate. (Those with disabilities should refer to general Fire Emergency Instructions on page 5.) Fire alarms systems vary throughout the university. Alarm devices in some systems activate throughout the entire facility when a detector activates while the devices in other systems activate only on select floors within a facility. You should be familiar with the system type in the building(s) that you work in. There is no way of knowing if an alarm signifies a drill or an actual fire emergency; therefore, every alarm must be treated as a potentially serious fire.
General Fire Emergency Instructions

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 the routes of egress.
- At the first class meeting announce to the students the egress routes from the floor and the building; and what is expected when there is a fire and the alarm is activated.

IF YOU SUSPECT OR DISCOVER A FIRE

Pull the Nearest Fire Alarm

- Follow the instructions on the pull station. The alarm is automatically transmitted to the Fire Department.
- See pull-out poster for R.A.C.E.

Call Public Safety - from a safe location

- The Public Safety Department can be reached at extension 8-2222 (Washington Square), 8-9828 (Dental), 3537 (School of Engineering) & (212) 772-5808 (IFA). Public Safety personnel should be notified of the location of the smoke or fire condition, including the building, floor and/or room number and the name and telephone extension of the individual reporting the incident.
- Personnel at non-campus venues such as the Midtown Center shall rely on the respective building safety plan.
- Do not attempt to fight the fire
Evacuate

- Upon hearing the alarm, **faculty members, staff and students** must exit the building using the nearest safe means of egress. Follow the evacuation chart posted in every elevator lobby.
- Close all doors and windows to prevent the spread of fire and smoke. Leave lights on.
- **Never** use an elevator during a fire alarm activation.
- Keep low to the floor to avoid smoke and toxic gases.
- Once in the stairway, proceed down to the first floor and exit the building. Move away from the building, out of the way of firefighters and other emergency personnel.
- Do not attempt or allow students or personnel to re-enter the building for any reason, until you are authorized to do so.
- You are requested to assist persons with disabilities. The person should either remain in the area or be relocated to an area of rescue assistance preferably a room with an exterior window and a telephone. A Fire Warden if present should be consulted to determine the best course of action. The Public Safety Department should be called immediately and advised of the exact location of the person(s). If a telephone is not readily available, someone should go to the building entrance and notify the Public Safety Officer on duty of the exact location of the person(s). The Public Safety Department will inform the Fire Department of the location and the Fire Department will determine if an evacuation is warranted. Only the Fire Department will attempt to evacuate the person(s) requiring assistance.

- If you are a person requiring assistance, contact NYU Public Safety at (212) 998-2222 or 911 for assistance.
• If you are a person requiring assistance, & are not in an NYU owned and operated building request assistance, if available, from someone nearby. Move to a location/room near the fire stairway with an exterior window. Request the person providing assistance to notify fire personnel of your location; call 911 to let the Fire Department know your location in the building. The Fire Department will evacuate you.

Fire Wardens & Searchers
• Certain buildings are required by Fire Code to have wardens & searchers. In these buildings follow the instruction of the wardens & searchers during fire alarm activations.

Specific Fire Emergency Instructions

IF YOU SUSPECT OR DISCOVER A FIRE

In Laboratories

• Pull The Nearest Fire Alarm
• If possible - Shut off all gas burning equipment; disconnect or switch off all electrical instruments and appliances with the exception of refrigerators and incubators. Close the windows and leave the lights on.
• If Possible - Move pressurized gas cylinders to a safe area.
• Notify others of the fire as stated in the General Fire Emergency Instructions
• Evacuate
Animal Areas

- Pull The Nearest Fire Alarm
- *If possible* - Be sure all animals in your area are securely caged.
- *If possible* - Remove all animals in transit or in hallways to the nearest room. Be sure that cages are securely fastened.
- Notify others of the fire as stated in the General Fire Emergency Instructions
- Evacuate

IF YOU ARE TRAPPED

- Don’t Panic!
- If a telephone is available, notify the Fire Department and/or NYU Public Safety of your exact location.
- Keep doors closed. Do not attempt to open a door without first feeling with the back of your hand. If the door is hot, try another exit. If no other exit is available, seal openings into the area with available materials.
- Signal firefighters from a window if possible.
- Stay close to the floor. If fresh air is needed open the window slightly at the bottom.
- Remain by the window until the Fire Department arrives.

NO SMOKING

New York University is a smoke free environment. Smoking is not permitted on University property.
How Fires Start

Fire is a chemical chain reaction involving rapid oxidation or burning of a fuel. It requires three elements commonly known as the fire triangle to occur:

**Fuel** - Fuel can be any combustible material: solid, liquid or gas.

**Oxygen** - The air we breathe is approximately 21% oxygen. Fire needs only an atmosphere with at least 16% oxygen.

**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 take place.

Take any one of these three factors away, and fire cannot occur or will be extinguished if already burning.
**Classification of Fires**

**Class A** - Ordinary combustibles or fibrous material, such as wood, paper, cloth, rubber and some plastics.

**Class B** - Flammable or combustible liquids and gases such as gasoline, kerosene, paint, paint thinners and propane.

**Class C** - Energized electrical equipment, such as appliances, switches, panel boxes and power tools.

**Class D** - Combustible metals such as magnesium, titanium, potassium and sodium. **Explosive reactions can result from using common extinguishing agents on fires involving Class D materials.**
Prevention of Fires

CLASS A - Ordinary Combustibles:
- Keep storage and work areas free of trash.
- Place oily rags and similar materials in covered metal containers away from sources of ignition.
- Empty all trash containers daily.

CLASS B - Flammable Liquids or Gases:
- Use flammable liquids and gases only in well ventilated areas.
- Keep flammable liquids and gases stored in tightly sealed, self-closing and spill-proof containers.
- Store flammable liquids and gases away from sources of ignition.
- Do not refuel gasoline powered equipment indoors.
- Clean up flammable liquid spills quickly.

CLASS C - Electrical Equipment:
- Check electrical equipment for old or worn wiring or broken, damaged fittings.
- Prevent overheating of electric motors by keeping them clean and in good working order.
- Never install a fuse rated higher than specified for a circuit.
- Don’t plug more than one heat-producing appliance into an outlet.
- Never overload wall outlets. One outlet should have no more than two plugs.
- Investigate any appliance or electrical equipment that smells strange. Unusual odors can be the first sign of fire.

CLASS D – Combustible Metals:
Always follow the material handling guidelines for the material in use, as specified by the supplier and the Material Safety Data Sheet (MSDS).
Portable Fire Extinguishers

Every portable fire extinguisher displays the rating on the faceplate indicating the class of fire which it is designed to be effective on. 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 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.
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.

In an emergency situation you should know how to use an extinguisher properly. **Important: Choose the correct class of extinguisher for the fire situation. Never fight a fire alone.**

Use the PASS method. **PULL, AIM, SQUEEZE, SWEEP.** (See pull-out poster.)

**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
Environmental Health and Safety Department

The Environmental Health and Safety Department is available to assist University offices with any fire safety concerns. The department also provides environmental/occupational health & safety consulting services for the NYU Community. The department web site at http://www.nyu.edu/ehs/ contains University guidelines for these issues.

For questions or additional information, call the Environmental Services Department: 10 Astor Pl. 6th Floor at (212) 992-8262 or email at; ehs.nyu.edu
Remember RACE during fire

- **E**vacuate/Extinguish—Evacuate building
- **C**ontain—Close all doors and windows
- **A**lert—Pull fire alarm, dial emergency number
- **R**escue—Rescue people in immediate danger

- Extinguish small fires.
How to Use a Fire Extinguisher

It's easy to remember how to use a fire extinguisher if you can remember the acronym PASS, which stands for PULL, AIM, SQUEEZE, and SWEEP.

Do not fight a fire alone. Always make sure a route of escape is available.

Pull the pin.

This will allow you to discharge the extinguisher.

Aim at the base of the fire.

If you aim at the flames (which is frequently the temptation), the extinguisher agent will fly right through and do no good. You want to hit the fuel.

Squeeze the top handle or lever.

This depresses a button that releases the pressurized extinguishing agent in the extinguisher.

Sweep from side to side

Until the fire is completely out. Start using the extinguisher from a safe distance away, then move forward. Once the fire is out, keep an eye on the area in case it reignites.