

GENERAL WORK RULES FOR SAFETY

Safety is everyone's responsibility. Unsafe working conditions are not acceptable!

FACILITIES MANAGEMENT RESPONSIBILITIES

Facilities Management will work to provide a safe and healthy work environment for all employees. All safety equipment necessary to perform the job in the safest possible manner will be supplied through each individual Facilities Management section. Facilities Management will correct, to the best of its ability, any hazardous situation that has the potential to endanger the lives or well-being of any employee.

ENVIRONMENTAL HEALTH SERVICES RESPONSIBILITIES

Environmental Health Services will: file and administer all workers' compensation claims presented by employees; provide right-to-know training; provide blood-borne pathogen training; provide "Better Back Program" training in lifting techniques.

SUPERVISOR RESPONSIBILITIES

Supervisors are responsible for maintaining and allocating that portion of their budget, which is necessary for safety. Supervisors are responsible for complete, accurate, and timely reporting of all employee personal injuries and/or accidents. Supervisors will ensure that employees receive the proper training regarding the correct and safe way to operate their equipment. They will inform the employees of any new or special job-related training offered by the University. Supervisors will identify and report all hazards.

EMPLOYEE RESPONSIBILITIES

In order to make the Facilities Management safety program a success, it is the employee's responsibility to understand the safety rules and suggestions set forth by this manual. If a condition that is unsafe or destructive to any person or property is observed, correct the situation, report the incident to the Dispatch Office (491-0077), or report it to the appropriate responsible person. It is the employee's responsibility to use the protective equipment required or suggested in this manual. Proper care and treatment of such equipment is required in order to keep it in good working order.

CONDUCT

Make it habit to work safely every day. Practical jokes, horseplay, fighting, or any other activity jeopardizing your safety or any other employee's safety will not be tolerated. Be sure to acquire all of the proper safety gear for the job. Safety devices and guards installed on machines and equipment are there to protect employees and must not be removed or made inoperative.

SMOKING

Facilities Management has adopted and will enforce Governor Romer's Executive Order of 1991, which prohibit smoking in all public areas. Smoking is restricted to designated smoking areas. Never smoke in hallways, stairwells, elevators, vehicles, or in any other public area that is not designated "Smoking Area." Safe disposal of matches, cigarettes, cigars, or other burning substances is required. These materials must be extinguished and placed in a proper receptacle.

INTOXICANTS

The use of intoxicating beverages and/or drugs during working hours is strictly prohibited and is cause for disciplinary action including possible termination. Any employee under the influence of intoxicating beverages and/or drugs will not be allowed on the job.

Physician-prescribed medication will be allowed provided it does not impair job performance. The supervisor must be notified of any new prescription or change in prescription, which affects the employee's ability to perform their assigned job duties.

HOUSEKEEPING

We all need to practice good housekeeping. The work being performed produces dust, waste liquids, sawdust, and scrap metal filings and chips. Thus, time to clean up the work area should be incorporated into the work schedule. This habit will help minimize spillage and scrap. Also, saving pieces of materials for use in future projects and returning even small parts to their storage area will promote a clean and efficient work environment.

CLOTHING

Facilities Management employees are required to dress appropriately for their particular job and use the proper safety equipment as required. When working near equipment or with chemicals, wear full length pants, shirts that reach the waist, and closed-toe shoes. Loose clothing, a dangling watch, key chains, or any other unnecessary dangling items are prohibited when working with, on, or around any machinery with moving parts. Rubber gloves and steel-toed shoes are to be worn when the work requires them. If ever in doubt, put them on. Many positions are required to work in extreme, inclement weather. Proper attire is required to avoid adverse exposure to high and low temperatures, rain, snow, high winds, etc. There are variations to these rules within work groups. Please be aware of these while reading the section that applies to your work group.

EYE PROTECTION

Eye protection is to be worn whenever work is being performed in or around potentially hazardous situations.

Prescription Safety Glasses

Facilities Management will replace prescription safety glasses when required (i.e., when prescription safety glasses are required to perform job duties; when prescription changes; or, if glasses are broken during employment). Updated prescriptions will be subsidized for lenses only, as long as the frames are in good condition. For complete information, please see Facilities Management Personal Protective Policy or check with your supervisor.

Goggles

Goggles can be obtained from the warehouse. All personnel involved in work where flying particles are a hazard should have access to, and wear, goggles.

Contact Lenses

Wearing contact lenses has been proven to be an unsafe work practice. If, for example, a harsh cleaning agent was being used and it was accidentally splashed into the eyes, contact lenses could actually fuse to the eyeball. Therefore, employees who require corrective lenses will either wear goggles or be provided prescription safety glasses. Non-State Classified Employees may order prescription glasses, but need to pay for them at Facilities Management cost. Nonprescription safety glasses or goggles will be furnished at no charge.

SAFETY SHOES

It is a matter of a few simple steps to get safe footwear. Follow the procedure below:

- ♦ Purchase a pair of safety shoes or boots. They must meet the current ANSI standards (they must have steel toes). There are stores which will give CSU employees an additional 20% discount.
- ♦ Bring in the receipt.
- ♦ The supervisor will authorize the warehouse to reimburse you up to a maximum of \$100.00. This allowance will be given once per year unless unusual circumstances in the work environment result in premature failure of the footwear.
- ♦ Full reimbursement for repair of steel-toed shoes can also be authorized, not to exceed \$30.00 per pair.

The above applies to state classified employees only. Non-classified employees are able to get any CSU discounts, but they will not be reimbursed. Non-classified employees are still required to wear proper footwear.

HEARING PROTECTION

Ear plugs will be provided to all employees. Ear plugs are to be worn in all areas where loud noise or continuous noise is a problem. They are available at the Facilities Management Warehouse. Custom ear attenuators are available for state classified employees.

FIRE PROTECTION

In case of fire, call 911; be sure to know the locations of hoses and other fire protection equipment in and around the work areas. Be aware of building floor plans posted in buildings that show emergency exits, fire pull stations, and fire extinguisher locations. Fire protection equipment should not be moved or removed from the designated storage area except when in use. After a fire extinguisher has been used in an area, wait until the area has been thoroughly ventilated before entering. If a fire extinguisher has been discharged for any reason, report it to dispatch immediately.

POSTED HAZARDS

Never enter a lab without reading and obeying the posted hazard label on the door.

MATERIAL SAFETY DATA SHEETS

All employees should be familiar with Material Safety Data Sheets (MSDS). The MSDS provide specific safety information pertaining to various products and their use. Master files are maintained at Environmental Health Services but if an employee needs MSDS sheet, he/she should contact their supervisor.

Please see end of this chapter for sample MSDS Data Sheet.

VEHICLE REGULATIONS

RESTRICTIONS

- ♦ In order to operate a motor vehicle while performing job duties, the driver must have a valid Colorado driver's license and be licensed for the particular type of vehicle they are operating (e.g., commercial drivers license). Carry the license at all times.
- ♦ All state, local, and CSU motor vehicle laws and regulations will be obeyed at all times. Persons other than CSU employees are not allowed to drive or operate a CSU vehicle.
- ♦ Riding on running boards, fenders, or any part of the vehicle except on the seats or seated inside the body walls will not be permitted. This is a state law.
- ♦ Do not ride on trailers, and do not jump on or off vehicles in motion.
- ♦ Remember to obey the speed limits and traffic signs on campus streets and parking lots. The Motor Pool parking lot can be a particularly dangerous area. Please drive carefully and stay alert!
- ♦ Smoking is prohibited in all state vehicles.

OPERATION

The safe operation of work vehicles is one of our main concerns. The majority of accidents that occur with motor vehicles are avoidable. Obey the following guidelines for safe operation of state vehicles:

ALWAYS:

- ♦ wear a seat belt. The state will not pay injury compensation if a seat belt is not worn and an accident occurs.
- ♦ make sure the vehicle is in safe operating condition before use. Report any defects, which may develop during your shift so that proper maintenance may be carried out as soon as possible. The safe operation of the vehicle may be jeopardized if defects are not reported.
- ♦ practice common courtesy toward other operators.
- ♦ stop and yield right of way to pedestrians. Yield the right of way to other vehicles (including bicycles) when failure to do so might result in an accident and/or endanger any person or vehicle.
- ♦ park on the right side of the road in the direction in which traffic is flowing.
- ♦ position the vehicle to avoid backing up unnecessarily whenever possible. Because of the large amount of pedestrian traffic on the CSU campus, backing motor vehicles creates risks.

NEVER:

- ♦ leave any building, enclosure, alley, or street where vision is obstructed until making a complete stop. After looking both ways, proceed with caution.
- ♦ smoke or leave your ignition system on while refueling.

VEHICLE ACCIDENT REPORTING PROCEDURES

All Facilities Management vehicles must comply with the accident procedures required by the Colorado State Fleet Management program.

An accident is **ANY** incident occurring that may have caused damage to any State owned vehicle, or caused damage to private property. All accidents **MUST** be reported, whether there is any damage or not. Accident damages include:

Damage caused by another vehicle, road hazard, wildlife, weather (wind, rain, hail, etc.), or vandals (this includes glass, tire, body damage, stolen vehicles, etc.). NOTE: Stolen vehicles must be reported immediately to insure that you are issued a replacement vehicle.

If you are in doubt about whether any of these requirements apply to your situation, please call Transportation Services at 491-0016.

Accident Procedures

At the scene of an accident involving a State Fleet Management vehicle, the driver **must** do the following:

- A. Stop immediately and aid any injured persons.
- B. NOTIFY THE LOCAL POLICE by calling 491-6425 if the accident occurred on campus. Call 911 if the accident occurred off campus or involves injuries. If the local police will not send an officer to the scene, file a counter report at the local police station or State Patrol section.
- C. DO NOT leave the scene or move the vehicle until the law enforcement agency has completed its investigation or until they have asked you to move it. If the vehicle(s) create a definite hazard, please mark the location of each vehicle involved, then move the vehicle(s). Even if the other driver leaves, remain at the scene until released by a law enforcement officer. If the other driver leaves the scene, be prepared to provide a description to the investigating officer.
- D. CALL YOUR SUPERVISOR – REQUIRED FOR ALL ACCIDENTS.
- E. **DO NOT ADMIT FAULT OR MAKE COMMITMENTS. DO NOT GIVE STATEMENTS TO ANYONE EXCEPT THE POLICE OR YOUR SUPERVISOR.**
- F. Present the State of Colorado Insurance Card. This is on the last page of the State Fleet Management Vehicle Operator's Manual contained in your vehicle. Present the registration for your vehicle, which should also be in the blue vehicle packet, to the investigating officer.
- G. Write down ALL information required on the other driver:
 - Name
 - Address
 - Drivers license number and state, expiration date, date of birth
 - Home and work telephone numbers
 - Vehicle owners name and address
 - Year, make, model, and license plate number of the vehicle
 - Insurance company and policy number
 - Injured parties name(s)
 - Witnesses names, addresses and telephone numbers
- H. Write notes concerning the accident. These notes will help when you complete the accident report.

I. TOWING

DO NOT ATTEMPT TO DRIVE AN UNSAFE VEHICLE OR A VEHICLE WITH FLUID LEAKS.

Call Transportation Services at 491-0116 to arrange for towing.

Even if the vehicle does not require towing, all accidents **MUST** be reported to State Fleet Management regardless of the dollar amount of damage. Contact Transportation Services at 491-0016 to report every accident. Transportation Services will coordinate the reporting requirements and obtain any repair estimates that may be needed.

WORK ENVIRONMENT

AREA PROTECTION

Work area protection involves warning students and the general public that they are approaching worksites that pose possible safety hazards. Wet or slick floors, areas being stripped and waxed, and electrical cords which pose possible trip hazards are a few examples. This protection can be accomplished by placing barricades, cones, caution tape, and/or signs in the vicinity that warn of an approaching hazard.

LIGHTING

Always use adequate lighting to illuminate the work area and to ensure safe completion of the work. For temporary lighting use extension cords or other electrical sources that are property insulated and grounded. Cords that run across a walkway must be taped down and marked as tripping hazards.

VENTILATION

Exhaust ventilation systems, where provided, must be used whenever work is in progress. Never begin a job that requires special exhaust procedures until adequate ventilation is ensured.

WORK AREA GUIDELINES

Report all fires, floods, break-ins, suspicious persons, disasters and emergencies to the CSU Police Department (dial 911) as soon as the emergency or potential emergency is identified.

No animals of any kind are allowed in university facilities. Exceptions include: assistance dogs for physically disabled persons; dogs engaged in law enforcement activities; animals brought for treatment to University Veterinary Medicine facilities or for sponsored research; animals brought to events sponsored by a department of the University or a recognized student organization that has received advance approval from director of Lory Student Center, director of Facilities Management, and/or director of Housing Services; other such exceptions as may be approved by the director of Facilities Management. Report vicious animals or animal attacks to CSU Police Department by calling **911**. Report animals running free or inside buildings to Larimer County Animal Control at 226-3647. Unattended animals attached to CSU structures or staked should be reported to CSUPD.

Fire doors shall not be propped open. On other doors, wedges may be used only under the door, not on the hinge side. Remove wedges at the end of each shift.

Doors that you unlock must be relocked during breaks, whenever you are out of the area, or at the completion of the work in these rooms. Minimize the number of doors left unlocked while working.

Friends, relatives, or other visitors, who are not employed by Facilities Management, are generally restricted from access to University facilities. Friends, relatives, or other visitors are not to provide assistance to employees in their work, nor are they to provide companionship during work hours. Visitors may be allowed in unsecured building lobbies and public areas during lunch and break periods. Supervisory approval may be required.

LIFTING, CARRYING, AND HANDLING SAFETY PROCEDURES

Many injuries result from sprains and strains of the back and joints. It is important that everyone uses proper lifting and handling procedures in an effort to reduce these injuries.

GENERAL HANDLING PROCEDURES

All objects to be handled should be inspected for slivers, jagged edges, burrs, and rough or slippery surfaces. Care should be taken to prevent fingers, toes, or other body parts from being pinched or smashed while handling a heavy or awkward load (including wearing gloves and safety shoes).

LIFTING

Before lifting any object, the size, weight, and shape of the object need to be considered to determine if it can be safely handled. Whenever possible use power or mechanical lifting equipment to avoid the hazards of manual lifting.

Lifting is subject to the following:

1. Individual's capacity
2. Type of load
3. Frequency with which the load is lifted
4. Position in which the load must be lifted.

The maximum lifting capability of each person is stated in his or her job description. Irregularly shaped or unevenly weighted objects are significantly more difficult to handle and may require two people to carry. Never attempt to lift more than you can carry comfortably. Get help when there is any question as to whether the object can be safely lifted by one person.

Whenever possible, use the following steps to assure a proper lifting stance:

1. Secure good footing with feet parted, one alongside, one behind the object.
2. Take a firm grip with both hands.
3. Tuck elbows and arms in.
4. Keep back straight - nearly vertical.
5. Tuck chin in so neck and head keep a straight line
6. Keep body weight directly over feet.

Once in this stance, lift with your leg muscles - slowly, smoothly and without jerking. When setting down a load follow the six steps in the opposite order, remembering to use your leg muscles rather than those of the back.

Avoid twisting while lifting, handling, or carrying a load. When carrying a load, turn yourself by pointing the forward foot in the direction of the eventual movement. When raising an object to or above shoulder height, bend knees and shift hand position so that the object can be boosted above shoulder level.

When carrying a load, you must be able to see ahead of yourself. If this is not possible, get help. Whenever possible, clear the path of travel before initially lifting the object. Planning a route to allow a place to set the load down if fatigue becomes too great is the best way to avoid accidents and/or injuries. If a heavy load is carried a great distance, your grip may lessen due to fatigue. If the object is slippery, awkward, or too heavy, it may be dropped causing foot injuries. To avoid excessive strain, carry the object close to the body with the load centered at the pelvis, and keep the back as straight as possible. Work as a team when two or more persons are lifting an object. Only one person should give instructions. Determine signals for lifting, turning, and setting down the load. Timing and coordination are important.

GENERAL EQUIPMENT SAFETY PROCEDURES

All tools and machinery must be clean and in proper working order. **Do not work with or operate defective equipment. Report defects to your supervisor immediately!** Tag defective tools to prevent their use and remove them from the job site, then report defect to your supervisor. Always follow the manufacturer's suggested safety precautions when using tools or machinery. Tools, rags, scrap, or any other object that could fall into or get caught in a machine should never be placed on, above, or around machinery.

HAND TOOLS

Improper use of hand tools causes disabling injuries. These disabilities result from misuse of tools or using tools that are damaged. Disabilities include loss of vision and eyes; puncture wounds from flying chips; severed fingers, tendons, and arteries; broken bones; contusions; infections from puncture wounds; and many other injuries.

There are five safe practices to follow, which can prevent injuries:

1. Always wear safety goggles to protect eyes. In operations requiring the use of hand or portable power tools, particles may fly. Therefore, it is essential that safety goggles, or equivalent eye protection, be worn by the operator and anyone in the immediate vicinity.
2. Select the right tool for the job. Examples of **unsafe** practices are:
 - ♦ striking hardened striking faces of hand tools together (such as using any hammer to strike another hammer or hatchet),
 - ♦ using a claw hammer to strike a steel chisel,
 - ♦ using a file or a screwdriver as a pry,
 - ♦ using a wrench as a hammer, and
 - ♦ using pliers instead of the proper wrench.
3. Keep tools in good condition. **Unsafe** tools include:
 - ♦ wrenches with cracked or worn jaws; screwdrivers with broken tips, split or broken handles; hammers with chipped, mushroomed, or loose heads, split or broken handles; mushroomed heads on chisels; dull saws; and extension cords or electric tools with broken plugs, improper or removed grounding system, or visible damage.
4. Use tools correctly. Some common causes of accidents are:
 - ♦ screwdrivers applied to objects held in the hand,
 - ♦ knives pulled toward the body,
 - ♦ failure to ground electrical equipment, and
 - ♦ nail hammers striking hardened tools.
5. Keep tools in a safe place. Many accidents have been caused by tools falling from overhead storage and by knives, chisels, and other sharp tools carried in pockets or left in tool boxes with cutting edges exposed.

KNIVES AND OTHER CUTTING TOOLS

Knives are essential for doing many jobs correctly, but they can be dangerous when not treated with proper care and caution. Likewise, they are a hazard when used improperly or used on a job that should be performed with another tool. Here are a few simple safety guidelines when using a knife:

- ♦ Keep cutting tools sharp and in good condition. A dull knife facilitates injury because of the extra work required to do the same job.

- ♦ Store the cutting tools in a rack or tool box when not in use. This protects you and prevents damage to the blade.
- ♦ If you must carry a knife on the job, carry it in a sheath or holder. When using a utility knife, remember to close it.
- ♦ Cut away from your body. The most common accident when using a knife is cutting the hand or fingers of the guide hand. Be aware of your guide hand when cutting long sections.
- ♦ Wipe blade clean on a towel or cloth, not on your clothes. Working with a dirty or wet knife is working with a tool that is not in proper working condition.

LONG-HANDLED TOOLS

- ♦ Inspect wooden handles before use. Replace those that are loose, cracked, or splintered.
- ♦ Don't tape or wire a defective handle. This does not eliminate the hazard.
- ♦ Inspect the head of the tool. Check to see that it is securely attached to the handle and is in good condition to do the work it is designed for.
- ♦ Carry long-handled tools upright with the handle vertical so as not to poke anyone in front of or behind you.
- ♦ Never leave long-handled tools lying on the floor where they pose a tripping hazard. Don't leave them leaning against a wall or door where they could fall over and present the same problem.
- ♦ When using a long-handled tool, keep work out in front of you so as not to trip on the working head.
- ♦ Be aware of what is directly behind you when using long-handled tools. It has been a common occurrence for employees to injure themselves by backing into desks, chairs, counter tops, etc.

SHOVELS

- ♦ Part of keeping a snow shovel in good condition is trimming off curled edges. Trimming should be done as the curled edges present a work impediment or a safety hazard. Check with your supervisor to have this done.
- ♦ Lift a shovel load as you would any other load, keeping the back as straight as possible and using your legs to do the lifting rather than your back. (See LIFTING, CARRYING, HANDLING Section).
- ♦ Use the ball of the foot to press a shovel into stiff ground or material. This helps avoid damage to the arch of the foot or other injury resulting from the foot slipping off the shovel. When digging with a shovel, proper footwear is essential in preventing injuries.

MACHINERY

Because of the many moving parts and constant current of electricity associated with machinery, it is important to exercise extra care.

- ♦ Operate only the machinery that you have been trained to use properly. When servicing or inspecting any machinery, be sure it is unplugged or the breaker is turned off. Lock Out/ Tag Out the power source as needed. Disconnect the switch.

- ♦ Do not operate any machine if it is not functioning properly. Make sure the machine is in good working order before starting use. Discontinue use of a machine if anything is unusual about its performance.
- ♦ Don't leave portable machinery plugged in and unattended! Unplug the machine when not in use and never leave it unattended in a place where anyone who is not authorized to use it might have access to it. Before using any electrical machine, inspect the cord for bare or frayed wires and the plug for bent or broken prongs. Ask your supervisor to get defects repaired before using the machine.
- ♦ Keep all safety guards in place and operating properly at all times. If missing or partially detached, they will hinder your work process and could pose a threat of injury. They are there for your protection.
- ♦ Keep track of where the cord is and avoid using machinery in a location where the cord presents a tripping hazard. Mark any cord that crosses a walking path. When using extension cords, keep enough slack so that the cord remains on the ground to avoid getting pulled from the outlet. This can cause bent or broken prongs or can pull the wire or insulation from the plug, which may present a shock hazard. For the same reasons, unwind the cord before plugging it in and unplug the cord before winding it back up.
- ♦ When checking batteries or wiring, make sure the power is turned off.

WAYS TO AVOID TOOL ACCIDENTS IN THE SHOP

Shop supervisors should incorporate a program to control tool accidents by following these points:

- a. Train employees to select the right tools for each job and ensure they are available.
- b. Establish regular tool inspection procedures to make sure tools are maintained in safe condition.
- c. Train and supervise employees in the correct use of tools for each job.
- d. Enforce use of proper personal protective equipment.
- e. Plan each job in advance in order to use the proper tool (not makeshift or substitute tools).
- f. Make sure personal tools are approved before using them to perform work for CSU.

Do not use conductive tools on or near electrical wiring or equipment. Never leave unsecured tools on elevated places. For example, when working near an open grating, use a screen or other suitable covering to secure tools, thus preventing them from falling and injuring persons below. Don't attempt to correct defective handles of tools by taping or wiring them. Wooden handles that become loose, cracked, or splintered must be replaced.

ELEVATOR SAFETY RULES AND RATIONALE

General Rules:

- ♦ **Enter and exit carefully. Observe the entrance floor. Step up or down if elevator floor and hall floor aren't level with each other. Before entering, stand aside and allow exiting passengers to get off.**
 - a. It is very important to pay attention to the level of the floor when entering and exiting an elevator.
 - b. On occasion, the hall floor may not be exactly even with the elevator floor. Paying attention will prevent passengers from tripping.
 - c. Step over the gap.
- ♦ **Watch for closing doors. Only touch or stop them if they are expected to interfere with passage.**
 - a. Although many elevators' doors are provided with protective edges designed to reopen when touched, they should be treated like any moving equipment.
 - b. Contact should be avoided unless absolutely necessary.
 - c. It is also important to enter and exit quickly.
 - d. Press the door button or ask another passenger to press the "door open" button (reversing doors) to allow a slow mover the time to enter or exit.
 - e. Stand clear, let the doors open and keep both your and children's hands and clothing away from the doors.
- ♦ **If the doors don't open when the elevator stops, ring the alarm button and wait. Never force the doors open or try to exit.**
 - a. Attempting to force the doors open is dangerous because the elevator could resume travel without warning and seriously injure someone. For some, it will be difficult to wait but alternatives are much worse.
 - b. The inside of the elevator is the safest place. There are plenty of dangers in the hoistway which is not designed for people.
 - c. Only trained specialists know how to safely remove passengers or restart the elevator.
 - d. Chances of the elevator failing are extremely rare as any one of the many required cables which can individually hold a fully loaded elevator in place. Even under the horrifying conditions of the World Trade Center bombing, elevator industry specialists and firemen rescued hundreds trapped in elevators, many in minutes.
 - e. Use the alarm button or stay on the phone if there is one; stay calm and most importantly, stay inside.
 - f. When help arrives, follow instructions for a safe exit.
- ♦ **In case of fire, never use the elevator, use the stairs.**
 - a. Building codes require exit stairwells to provide a good measure of protection in case of fire. In stairwells, doors are heavy and usually totally enclose the well-lighted stair area, which is designed to protect people from smoke and fire. In addition, on stairs you control the option of going up or down to avoid the fire and smoke.
 - b. Elevator shafts are often not sealed and act as a chimney, thereby attracting the smoke.
 - c. Most modern elevators are programmed to automatically return to the ground floor when the alarm is triggered. They will shut down and remain available for fire fighters only, so they won't respond to calls. You may waste precious time in a fire waiting for an elevator that doesn't come. Always use the stairs.

- d. If those in authority determine that it is safe for the building occupants to use certain elevators, announcements will be made. Follow directions.
- e. A handicapped individual would be safer moving to the stairwell to await rescue or to be carried down away from the fire and smoke. Those in authority may direct otherwise and their instructions should be followed.

FIRST AID PROCEDURES

The information in this section is not to be used in lieu of first aid training. It is meant to be a resource for response in emergency situations.

Many employees are aware of safety procedures, but accidents still occur. When someone is injured, not only is the victim frightened, but also the person who is first on the scene of the accident. The human drive to help someone in need is powerful. Yet, sometimes our drive may cloud our thinking and hinder our ability to react effectively or even cause us to freeze. Thus, this section provides information about primary treatment in the first crucial minutes, which may be performed by co-workers who are TRAINED in CPR and FIRST AID. Periodically, the Training Office of Facilities Management offers this training.

In the event of an accident, the first move by the rescuer should be to call 911 immediately. While having the opportunity to call for help is the ideal situation, many times a telephone will not be nearby. Therefore, you may need to comfort the victim and perform first aid.

The following information should be used as a tool for reviewing certain techniques and as quick reference if tragedy strikes in your work area. You must be familiar with the basic techniques for first aid in order to provide emergency treatment. If you are equipped with a clear procedure, you will be able to issue the best care without hesitation.

Use the acronym: REACT to remember the primary treatment procedure.

1. Remain calm.
2. Examine the situation to see if victim needs to be removed from the source of harm.
3. ABCs - airway, breathing, circulation.
4. Call for help.
5. Treat the victim only to the point that no further harm will result.

All of the above steps must be executed to assure proper care. This section will explain each step separately by discussing the situations which may occur.

1. REMAIN CALM

Remaining calm is first, because you, as the first person on the scene, must provide assurance to the injured person. If you show signs of uneasiness, the victim will perceive you as unable to handle the situation. Also, while saying "be calm" is easier said than done, once you have learned first aid procedures well, your actions will become instinctive. Therefore, attempt to remain calm in emergencies and, if familiar with first aid methods, do not hesitate to take charge of the situation, and do everything in your power to comfort and preserve the life of the injured. Do not excite or frighten the victim; instead, offer encouragement, which is strong medicine.

2. EXAMINE THE SITUATION

Examine the area for the source of the injury. Except for minor cuts and bruises, lay the victim down in a comfortable position. Examine all injuries, and see that an ambulance is called at once, if needed. Toxic fumes, such as carbon monoxide, chlorine, and sulfur dioxide; extreme heat or cold; and electrical wiring are the usual hazards which require removal of the victim. The following paragraphs will describe some of the harms from which you should immediately remove the victim to stop further injury.

Carbon monoxide poisoning from car exhaust accounts for 1,400 deaths annually. The victim is unaware of the harm because carbon monoxide is odorless and colorless. The victim sometimes will experience

dizziness before unconsciousness occurs. Even though signs are posted around campus reminding people to turn off their car near building ventilation systems, they either forget or are in a hurry. Always be an "Exhaust Watchdog"; be firm when telling someone to turn off his or her engine.

Areas of extreme temperatures, like working on a roof in hot weather or sitting on a lawn mower for too long, may be dangerous situations. When ventilation is poor, heat exhaustion or heat stroke may result. Symptoms exhibited by a person suffering from HEAT EXHAUSTION are: paleness in the face, clammy to the touch, dizziness and exhaustion, headache and weakness, with possible nausea. Heat Stroke is a more severe problem than heat exhaustion. Symptoms of HEAT STROKE: vomiting, appearance is flushed, red skin, either dry or moist, rapid weak pulse, shallow breathing, and the person will act confused. TREATMENT: Cold cloths to the skin, fanning and fluids. Do not let the conscious victim drink too quickly. Give about one (1) glass every 15 minutes. If victim vomits or becomes flushed and confused, it is HEAT STROKE. Call an ambulance immediately.

Though the chances are slim for getting locked in a walk-in freezer, it can happen. Prolonged exposure to extreme cold produces the following manifestations: shivering, numbness, low body temperatures, drowsiness, and noticeable muscular weakness. Treat COLD EXPOSURE immediately by:

1. giving mouth-to-mouth resuscitation, if necessary (if you are certified),
2. removing the victim into a warm room,
3. removing wet or frozen clothing and anything that is constricting,
4. giving hot liquids by mouth (no alcohol), if the victim is conscious, and
5. drying the victim thoroughly if water was used to re-warm.

Another situation of immediate harm is when a fellow worker is electrocuted and is still in contact with the source. Do not touch the person with your hands. Remove the source with something that is non-conducting, like a stick or wooden broom handle. You should be aware of all potential electrical dangers in and around your work area.

3. ABCs

Up to this point we've looked at the very immediate responses to a medical emergency situation. If you've remained calm and examined the area for harm, your next action should be to check whether or not the victim is breathing and has a pulse. If the victim is breathing and has a pulse, treat other injuries in order of priority as follows:

- a. Severe bleeding
- b. Shock
- c. Chemicals in the eyes
- d. Fractures
- e. Burns
- f. Open wounds

But, if the victim is not breathing, step #3 must be performed. Step #3 is the ABCs, which are **Airway, Breathing, and Circulation**. Before explaining the procedure, a little time should be spent discussing some of the causes as to why a person's airway can get blocked and why a person's breathing may stop.

A person's breathing can be stopped for any number of reasons. The most common is when the tongue drops back and blocks the throat (swallowing the tongue). Though you may think that breathing failure is rare and you probably have never experienced such a traumatic situation, consider these other causes of breathing failure:

Acute asthma, swelling from burns of the face, swallowing of corrosive poisons, direct injury caused by a blow, electrocution, drowning, circulatory collapse (shock), heart disease, external strangulation (hanging), compression of the chest (equipment or large fallen object on person), and drug overdose.

The following is the procedure to use when the airway is blocked or breathing has stopped.

When you come upon an unconscious person and there is no evidence of neck or spinal injury, tap or gently shake the person's shoulder and ask the internationally-known question, "Are you okay?" If no response, call for help if possible. Then check to see if the person's AIRWAY is open. Do this by putting one hand **on** the forehead and the other hand **under** the chin; gently tilt the head so that the person's chin is pointing up.

Next place **your** head near the person so that your ear is close to the nose and mouth and you can see the chest. This enables you to **feel** and **hear** any breathing at the same time, **see** the person's chest rising and falling. (Never give unconscious victims anything to drink. It may choke them.) If you cannot sense the person breathing, and **if you are trained** to perform mouth-to-mouth resuscitation (the B of the ABCs), commence with resuscitation.

With the head still tilted from when you checked the breathing, pinch the nose and take a deep breath. Open your mouth wide to make a good seal with the victim's mouth and give two deep, slow breaths without stopping. This should inflate the lungs of the victim, thus causing the chest to rise. Should the chest not rise during one of your breaths, one or more airway problems exist and must be corrected. For example, be certain there is an airtight seal between your mouth and the victim's. Re-secure the pinch on the nose. There may also be blockage caused by the tongue. Re-tip the victim's head to try to open the airway. If that doesn't work, there may be something blocking the airway like a piece of food. If so, give first aid for choking (discussed later). Once you get the two breaths into the victim, check the pulse and breathing for at least five seconds, but not more than ten.

To check the pulse of the victim, keep the head in the same tilted position with your hand on the forehead. With your other hand, place your fingertips on the Adam's apple and slide your fingers in the groove along the side of the neck nearest you. If there is a pulse but no breathing, give one breath every 5 seconds. To help remember the first aid steps for an unconscious person, use the phrase "A QUICK CHECK."

A -Airway	Tip the head and check for breathing
QUICK	Give 2 quick, full breaths
CHECK	Check the pulse and breathing

If no pulse or breathing is present, immediately move to "C" of the ABCs - Circulation.

Circulation involves applying chest compressions. There are 5 steps to chest compressions.

1. Use the index and middle fingers to find the lower edge of the victim's rib cage on the side nearest you.
2. Trace the edge of the ribs up to the notch where they meet the breastbone.
3. Place the middle finger on the notch, pointing across the chest. The index finger goes next to it, on the side closest to the victim's head.
4. Put the heel of the other hand onto the breastbone right next to the index finger.
5. Remove the two fingers from the notch. Place the heel of that hand on top of the other. Keep all fingers off the chest.

Now you are ready to compress the chest of the victim. Push straight down, keeping your elbows **locked**, with your shoulders directly over the heels of your hands. Keep your knees shoulder-width apart. Push down smoothly about 1 1/2 to 2 inches. Count "ONE and TWO and THREE" to pace yourself. Bend from the hip, not the knees. Keep fingers off the chest, Push 15 - Breath 2.

Give 15 compressions in approximately 10 seconds. Then tip the head and give two quick full breaths in approximately four seconds. Continue repeating 15 compressions followed by 2 breaths. Check the pulse and breathing after the first minute and every few minutes thereafter. (NOTE: Never simply practice chest compressions on anyone as it can cause internal injuries.)

The last rescue to discuss in step #3 is what to do if a co-worker is choking. There are many deaths every year attributed to suffocation due to choking. A person will die in 4 minutes if they are not helped. To identify if a person is choking and in need of help, notice if they are coughing and making sounds. If this is the case, leave them alone. But you must continue to watch them because if they stop coughing and making sounds, their windpipe has become entirely blocked and you must provide assistance.

The Heimlich maneuver

The technique to help a choking victim is called THE HEIMLICH MANEUVER. There are four steps to successfully unblock a victim's airway.

1. Stand behind the choking victim.
2. Wrap your arms around the victim's waist and lock your hands into a fist.
3. Place the thumb side of fist against the victim's abdomen, above the navel and below the rib cage.
4. Press fist into the victim's abdomen with a quick upward thrust. Continue upward thrusts until foreign matter is expelled.

If alone and you choke to the point of not being able to speak, breathe, or cough and no one is around to help, perform the HEIMLICH maneuver on yourself by:

- a. placing your fist, thumb-side against your stomach, between the navel and the lower portion of the rib cage, and
- b. grabbing your fist with other hand, do four upward thrusts.

If you must perform the Heimlich maneuver on someone who is pregnant or obese and cannot reach around the victim's abdomen, use the chest thrust maneuver by:

- a. placing the victim's arms up in the air,
- b. wrapping your arms high on the person's chest,
- c. performing four, rapid thrusts, pulling back toward you.

4. CALL FOR HELP

Calling for help is our step #4. Though you've been instructed to call for help in the first 3 steps, step #4 tells you how to call for help. Whereas calling for help is probably the first reaction that you will have, it follows the other three steps due to their importance in saving the victim. Many times, help may not be nearby or access to getting help could be difficult thus leaving you as the only rescuer. But possibly, you may be the second person at the scene of an accident and in the position to report the accident. If no phone is available but you have a two-way radio, call base to report the accident. You should be prepared to give very specific information to base, the Supervisor, or the 911 operator.

To report your location you should be able to give your address, the cross streets nearby, the name of the building and the department or office where the victim is. When the dispatcher understands the location, you must describe what happened, the approximate age of the victim, and the general health of the victim. Remaining calm is extremely important so that you communicate the information accurately. One way to alleviate the chance of miscommunication is to wait until the operator hangs up before you hang up.

5. TREAT THE VICTIM

Step #5 "Treat the victim only to the point that no further harm will not result," is vitally important because it addresses the "what not to do" along with the treatments for severe bleeding, shock, fractures, chemicals in the eyes, burns, and open wounds, which were discussed at the end of step #2.

Much of the work done on campus is performed on ladders or areas where the footing is far from secure. If you see a co-worker fall or come across someone who has fallen, DON'T MOVE HIM OR HER! A slip, trip, fall, or being struck on the head can result in a back or neck injury that may be compounded by moving the victim. The signs and symptoms are: severe pain; tenderness where the injury is located; the area may be deformed; possible paralysis may occur to one or more limbs; or pain caused by movement.

This first aid section can be a quick reference when accidents occur. Other information of note, is the location and contents of the RESPOND First Aid Centers. These are first aid kits mounted on a wall in your work area. You should become familiar with the contents of these kits.

Back Injuries

Some signs of back injuries are noticeable back or neck pain and/or breathing difficulties.

First Aid for Back Injury

1. Immobilize the head in the position you find the victim. Use blankets, clothing or any available material to hold the head and neck still.
2. If nothing is available to immobilize the head and neck, support it firmly (without moving it) with your hands.
3. Check for breathing difficulties.
4. Call 911 for medical assistance.

See following section for step by step procedure to check for consciousness and breathing.

CHECKING THE UNCONSCIOUS ADULT/CHILD

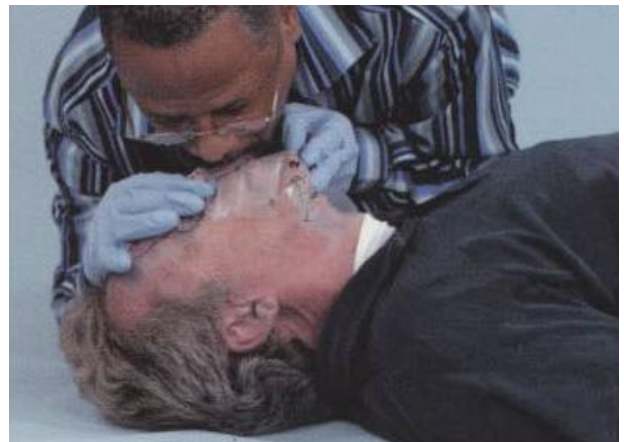
Step 1: Check the scene for safety, then check the victim... Shake the victim and shout, "Are you OK?"



Step 2: Open the airway. Look, listen, and feel for breathing for about 5 seconds.



Step 3: If no breathing, open the airway by tilting the head and lifting chin.



Step 4. If the victim is unconscious but breathing and shows signs of circulation... Place him or her in a recovery position.



Step 5: If the victim is not breathing or you Cannot tell.... Give 2 rescue breaths



Step 6: If breaths go in... Check for signs Of circulation for no more than 10 seconds. Check for severe bleeding. Give care for the conditions you find.

If breaths do not go in... GO TO re-lifting head and check again.

