

College of the Mainland
Employee Safety Manual

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SAFETY ADMINISTRATION **AND** **REQUIREMENTS**

Purpose

Safety Program

The purpose of the Safety Program is to establish a comprehensive system to ensure the safety and health of College students, faculty, staff, and visitors.

Safety Manual

The purpose of the Safety Manual is to provide guidance to College students, faculty, staff, and visitors on the Safety and Health Procedures for College of the Mainland.

Safety Program Objectives

The College of the Mainland Safety Program will seek to establish a safe environment through:

- Continuous inspection of all college facilities, vehicles, and work procedures to identify and correct hazardous working conditions and practices;
- Investigating and reviewing all accidents involving College employees and property to determine root causes and prevention measures;
- Providing adequate job training and continuing safety instruction to all employees;
- Developing reasonable, practical, and safe job procedures for College operations
- Establishing protective equipment guidelines for employees;
- Identifying, classifying, and monitoring the use of chemical substances

Scope

Due to the diversity of operations at the College, certain guidelines in this manual cannot be equally applied by all Departments. Therefore, Department leaders and members are expected to formulate and implement alternative methods when necessary to ensure that program objectives are not compromised. These considerations can be accomplished in several ways through direct communication with the safety office to address safety requirements and responsibilities. The requirements and guidelines in this manual are the **MINIMUM** requirements and should not be used as the ultimate decision in an unsafe condition.

Responsibilities

President

The President through the Vice President of College and Financial Services and the Safety and Environmental Health Officer are responsible for the overall management and administration of a comprehensive safety program for the College.

Safety and Environmental Health Officer

- Conduct inspections of the College operations and provide the necessary instructions and guidance to achieve compliance with applicable occupational health, safety, insurance, and ecological standards;
- Maintain adequate records of personal injuries;
- Investigate with a follow up procedure all employee accidents;
- Maintain and publish comprehensive reports of accidents and injuries for statistical analysis to determine trends, problem areas, and overall safety performance;
- Informing the administration about the status of matters affecting the Safety Program;
- Training of supervisors in safety and assisting them in coordinating adequate job procedures for employees;
- Advising and assisting in the administration of active and effective safety programs;
- Conducting follow-up investigations, when necessary, on accidents and injuries occurring in college work operations to determine causes and to enhance or establish preventive measures;
- Assisting the Director of Physical Plant in coordinating appropriate safety requirements for contractors; and
- Assisting the Purchasing Agent in coordinating appropriate safety engineering considerations for new equipment and material.

Campus Peace Officers

The Campus Peace Officers are commissioned by the Board of Trustees to maintain law and order. The Officers function under the authority listed in the Texas Code of Criminal Procedure and the Texas Education Code. The Campus Peace Officer's role in Campus Safety is to work in conjunction with the Safety Officer to increase safety awareness and reduce or eliminate workplace hazards.

The Campus Peace Officers serve in the following manner:

- Making an accident report at the time of an accident
- Communicating to the Safety Officer in reasonable time following an accident or injury.
- Community Education and Crime Prevention Awareness
- Self-Defense Courses
- Motor Vehicle Assistance
- Emergency Alert System
- Public Service Announcements

Employees

All College employees are required to develop safe work habits and to contribute in every manner possible to their own safety as well as the safety of their co-workers and the general public.

They shall:

- Promptly report to the Campus Peace Officers all accidents and injuries occurring during the course of their employment;
- Promptly report to their Department Leader all unsafe practices or conditions they observe;
- Cooperate with and assist in the investigation of accidents to identify correctable causes and to prevent their recurrence;
- Actively support and participate in safety promotion and education measures utilized in their departments;
- Become familiar with and practice all appropriate safe work procedures in regards to their job task.
- College employees shall exhibit constant concern for the safety of the public in the design and construction of projects, as well as in any maintenance, operations, or services of the College.
- Employees shall take every reasonable precaution to warn or protect the public from possible injury or damage in connection with College operations.

NOTIFICATION & CONTACT NUMBERS

Emergency Notification Numbers

- On Campus Emergency.....**599** or 911
- Off Campus Emergency.....911

Procedures in an Emergency

In the event of an Emergency notify campus police immediately by dialing **599** and follow any instructions.

- Think of every ones safety first.
- Use good judgment and training.
- Act claim and quickly.
- Be factual and unemotional with students and the community.

Note: Refer to the COM Emergency Management Manual for detailed Emergency Procedures.

ACCIDENTS / INJURIES

Accident Reporting

An accident is an unplanned occurrence that may result in damage to people, property, equipment, or the environment. When accidents are reported promptly, injured employees, students, and visitors receive timely medical care and unsafe conditions receive prompt corrective action. The Safety Office investigates accidents to identify accident trends, determine the effectiveness of current safety programs, and prevent future accidents.

IMPORTANT

Report all accidents and injuries to the Campus Police.

Reporting

If an accident or injury occurs;

- Campus Peace Officer shall be called immediately to the accident scene by the employee directly injured or by a witness.
- If immediate emergency assistance is necessary then this shall be called upon before the Campus Peace Officer. However, the Campus Peace Officer **MUST BE CALLED IMMEDIATELY AFTER AN EMERGENCY CALL.**
- Campus Peace Officer will complete an accident report on the scene. The report is then entered into electronic file at the Campus Police and copies are forwarded to Human Resources and the Safety Office . Additional copies of the report may be sent to the Department Head Leader by request. Information on the accident report is used in compliance with state guidelines on injury reporting.

Investigation of Accidents

The Safety Officer investigates all accidents. If corrective actions are necessary a work order is then submitted thru the work order system.

Accident Recording

The Safety Officer records and tracks all campus accidents to use for analyses. As well as corrective actions.

Compensation Benefits

Contact Human Resources

In no event should an employee of the College advise parties to the accident that the College is liable for any damages.

AUTOMATED EXTERNAL DEFIBRILLATORS (AED)

Each year in the United States an estimated 250,000-400,000 people suffer from sudden cardiac arrest. Ventricular fibrillation is the most common cause of death from sudden cardiac arrest and can be treated with early defibrillation that restores the heart to a normal rhythm. AEDs are electronic devices used to deliver an electric shock to someone suffering from sudden cardiac arrest (SCA). SCA is caused by rapid or chaotic electrical impulses in the heart.

The College's AED Program is managed thru the Safety Office.

AED units are located in the following buildings:

Student Center # 1	Lifelong Learning Center
Administration/Enrollment Center # 2	Learning Center – North County
Fine Arts Building # 3	Allied Health Building – North County
Physical Education Complex (Gym) # 4	Cosmetology
Technical/Vocational Building # 5	Gulf Coast Safety
Industrial Education Building # 6	
Welding Building # 7	
Learning Resources Center # 8 (library & 3 rd floor)	
Science/Math Building # 9	
College Services # 12	
Firing Range # 13	
Campus Police # 16 (plus one mobile unit)	
Public Service Careers # 18	
Conference Center # 21	

For more information on AED training please contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.

FIRE SAFETY

Know the location and operation of fire extinguishers, fire exits, and pull stations alarms in your area.

Report of Fire

In the event of a fire:

- Notify Campus Police immediately (Dial **599**)
- Use the R.A.C.E concept.

R – Rescue any victims in immediate danger.

A - Alarm, turn in the alarm, active the pull station alarm and/or dial 599 to notify Campus Police.

C - Confine the smoke and fire to the area of origin by closing the door.

E - Extinguish -or- Evacuate...use a fire extinguisher to put out the fire. If you are unsure or unable to do this then evacuate the immediate area.

Fire Prevention

An effective fire prevention program must have the understanding and cooperation of every College employee.

General Housekeeping

- Good housekeeping practices are one of the most important factors in the prevention of fires.
- Remove unnecessary combustible products from the work area.
- Store objects at least 18 inches below automatic sprinkler heads.

Electrical Wiring

- All electrical circuits and fittings shall be installed in accordance with the provisions of the National Electrical Code, by an authorized person, and shall be maintained in good repair.
- Excessive use of extension cords and the overloading of electrical outlets further increase the likelihood of a fire.
- Observe the electrical safety rules, both general and job specific

Smoking

- The use of tobacco products is strictly prohibited in or around all College of the Mainland owned facility and vehicles.

Storage

- Gasoline, oils, paints, and other flammable liquids and materials shall be stored in approved containers and rooms, or in isolated buildings.
- All Storage areas should be maintained in a neat and orderly fashion.

Fire Extinguishment

Classes of Fires

Fires are divided into four classes:



Class A - Fires of ordinary combustible materials: wood, paper, textiles, and brush.



Class B - Fires of flammable liquids: gasoline, oil, grease, and similar products.



Class C - Fires of an electrical nature.



Class D - Fires of combustible metals: Sodium, Magnesium.

Fire Extinguishers

- Portable fire extinguishers are located throughout all College of the Mainland facilities according to the type of fire they can extinguish.
- If an employee encounters a fire on College property, it is the decision of that employee whether or not to extinguish the fire with a fire extinguisher.
- Employees may request training in the proper use of fire extinguishers.

Under no circumstances should employees expose themselves to injury by fire. If a fire poses a substantial threat and cannot be easily extinguished, personnel shall evacuate the area and notify Campus Police, IMMEDIATELY!

For more information on Fire Safety please contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.

HAZARD COMMUNICATION

"Employees Right to Know"

Purpose

The Hazardous Communication Program establishes the guidelines for communication at the College of the Mainland concerning hazardous material inventory, material safety data sheets, product labels and other forms of warning, training contractor requirements, and non-routine tasks. It applies to all College of the Mainland locations where any hazardous chemical or substance are received, stored, used, reacted, developed or produced, including academic laboratories. The procedures described by the Hazardous Communication Program apply to all College of the Mainland faculty, staff students, contractors and subcontractors.

Employee Rights

Employees shall:

- Have access to the workplace chemical list and Material Safety Data Sheets (MSDS).
- Upon request, be provided a copy of a specific MSDS with any trade secret information deleted.
- Receive training concerning the hazards of the chemicals and measures they can take to protect themselves from those hazards.
- Be provided with appropriate personal protective equipment (PPE).

MSDS

Material Safety Data Sheet. These sheets tell you "everything you need to know" about a specific chemical.

By reading the **MSDS** you will be able to determine: (*Appendix A*).

- The **Health Hazards** associated with any chemical you are using or are exposed to;
- How **Flammable** the product is, and at what temperature it may ignite;
- The **Reactivity** of the chemical with water or other agents;
- What **Personal Protective Equipment (PPE)** is needed to work with the product.

The College maintains an electronic Database of its MSDS. It can be accessed from any computer with internet service from the Colleges Home Page under the Emergency Contact tab.

Each Department shall maintenance is own book for their specific area.

If you need assistance in obtaining a copy of the Hazcom Program or MSDS's, contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.

BLOODBORNE PATHOGENS

Bloodborne pathogens are microorganisms that are present in human blood and bodily fluids and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV) - the virus that causes AIDS.

To protect yourself, always assume that any blood or bodily fluid you come across is infected. Do not handle any materials, which are visibly contaminated with blood, or other potentially infectious materials unless you have been properly trained and are using appropriate personal protective equipment, such as gloves.

Do not discard broken glass, hypodermic needles, or other sharp objects in normal waste containers. Special precautions need to be taken to ensure that sharp objects are disposed of in impervious, puncture resistant, rigid containers to eliminate the hazard of physical injury.

For further information on Bloodborne Pathogens, contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.

VEHICLE SAFETY

The College maintains a small fleet of vehicles to accommodate, the transportation needs of the students and staff on College business.

- Vehicles will be released for trips only after the Director of Physical Plant is assured that the driver has a valid Texas Class B or C license appropriate for the vehicle requested.
- Vehicles will be available on a "first request, first-served" basis.
- Refer to the policies and procedure manual for more information on the use of college vehicles.

General Vehicle Safety

- **Observe Speed Limits and Traffic Laws** – Drivers shall comply with all State, Local, and College traffic laws.
- **Inspection** – Conduct a brief walk around vehicle inspection before departing.
- **Seat Belts** – All vehicle occupants must wear a seatbelt.
- **Cellular Phones** – The use of cellular phones by the driver while the vehicle is in motion is strongly discouraged.
- **Weather** – Rain, fog, sleet or icy pavement increase the hazards of driving. Slow down and be especially alert when driving in adverse conditions.
- **Backing Vehicle** – Whenever possible, park your vehicle where backing is not required.
- **Passing** – When passing another vehicle, look in all directions, check your blind spots, and use your signal. As a general rule, only pass one vehicle at a time.
- **Security** – College vehicles should be locked whenever they are unoccupied.

Drive Defensively

The principles of defensive driving include the following:

- **Knowledge:** Know your vehicle and know the law.
- **Control:** Always maintain control of your vehicle.
- **Attitude:** Be willing to obey all laws and be willing to yield to all other vehicles and pedestrians.
- **Reaction:** Respond to driving conditions appropriately.
- **Observation:** Be aware of potential accidents and take preventive measures. Always try to anticipate the actions of other drivers.
- **Common Sense:** Do not risk your safety to save time. Do not respond to rude or obnoxious drivers by violating traffic laws.

Special Vehicles

15 Passenger Vans

Due to the handling characteristics of 15 passenger vans, it is important that the operators fully understand the operations of these vehicles, especially when fully loaded.

In addition to the general safety guidelines the operator of 15 passenger vans should:

- Never exceed the manufacturer's recommended capacity. (Try to limit to 10 or less)
- Allow more distance for stopping.
- Avoid quick maneuvers.

Fork Lifts

The following guidelines should always be adhered to when operating a fork truck:

- Only employees who have completed an approved training course thru the College Safety Office shall be allowed to operate these vehicles.
- Operate in accordance to the manufacture specifications.
- Seat belts must be worn.
- No one shall ride on a load, the forklift body, or the prongs of the lift.
- Daily inspection log must be completed before use.
- Qualified drivers will be responsible for the care and operating condition of their equipment.
- Forklifts shall be operated at safe speeds, determined by condition of road, weather and loads.
- During operations, if an operator notices any mechanical difficulties, it will be his/her responsibility to stop the machine to prevent further damage and report the problem.

Golf Carts

When operating a Golf Cart:

- All body parts – feet, legs and arms shall be kept inside the vehicle while it is in motion.
- Pedestrians shall be afforded the right-of-way at all times.
- Golf cart operators shall remove the ignition key when not in use.
- Golf carts shall be operated in compliance with the common "rules of the road" regardless of whether carts are being operated on sidewalks or roadways.
- Golf carts shall not be parked in any manner likely to obstruct or interfere with the flow of pedestrian exiting buildings.
- All accidents involving golf carts shall be reported to the Campus Police, regardless of whether property or personal injury occurred.

GENERAL SAFETY

Accident Reporting

An accident is an unplanned occurrence that may result in damage to people, property, equipment, or the environment. When accidents are reported promptly, injured employees, students, and visitors receive timely medical care and unsafe conditions receive prompt corrective action. The Safety Office investigates accidents to identify accident trends, determine the effectiveness of current safety programs, and prevent future accidents.

IMPORTANT

Report all accidents and injuries to the Campus Police.

Preventing Slips, Trips and Falls

Employees should always follow good housekeeping practices and pay attention to their environment to avoid slips and falls.

In addition, employees should follow these guidelines:

- Turn on office lights. Ensure that passageways are adequately lighted.
- Avoid horseplay.
- Avoid unnecessary haste. Do not run in work areas.
- Use ladders or step stools to reach high places. Never climb onto a chair, drawer, or shelves.
- Keep hallways and stairwells neat and free of obstacles.
- Remove items that may pose a potential slipping hazard.
- Clean up spills as soon as they occur.
- Never obstruct your view when walking.
- Do not wear clothing that is too long or shoes that have slippery heels or soles.
- Hold the handrail when using stairs.
- Be careful when walking on wet surfaces or when entering a building while wearing wet shoes.
- Report uneven surfaces, such as loose or missing floor tiles, to the Physical Plant for repair.

Housekeeping

Good housekeeping practices are essential for personal safety. College of the Mainland employees are responsible for reducing potential hazards by keeping their work areas safe and clutter free.

Good housekeeping guidelines include:

- Keeping aisles and stairways free from clutter
- Cleaning up spills
- Keeping all exits free from obstructions.

Maintain clear and unobstructed access to emergency equipment, such as fire extinguishers, pull stations, and emergency eye wash/shower stations.

Lifting

Using good judgment is the key to safely lifting objects. If the object is too heavy to lift, seek assistance or use mechanical equipment to move the object.

When lifting heavy objects, follow these guidelines to ensure your safety:

- Face and stand as close as possible to the object with feet wide apart and with good footing.
- Bend at the knees, keeping the back as straight as possible.
- Get a firm, balanced grip on the object and pull it in towards you, keeping the center of gravity of the object close to you.
- Keeping your back as straight as possible, make the lift smoothly and under control as you begin straightening your legs.
- When moving the object, keep the load evenly balanced and proceed with caution through doors and around corners.
- Avoid twisting your body while lifting, moving, or setting down an object.
- When setting the load down, squat down, bending at the hips and knees, keeping your back as straight as possible.

Hazard Signs and Warning Labels

Hazard signs and warning labels are intended to provide advance notification of potential hazards. When a hazard exists appropriate signage must be utilized. They can be any form of written, printed or graphic material displayed for your protection.

Some common signs that denote physical hazards and may require personal protective equipment are: eye protection, hearing protection, head protection and hardhat areas.

- "Danger" sign indicates that there is an immediate hazard.
- "Caution" signs are used to warn against potential hazards.
- "Warning" sign is used to represent a hazard level between "Caution" and "Danger."

Electrical

- Unless it is a part of your regular job, don't attempt to repair or adjust any electrical equipment.
- All electrical equipment should have the Underwriters Laboratories (U.L.) label and should have 3 wire ground cords and plugs or be otherwise properly insulated.
- Ground wires leading from electrical apparatus must not be disconnected or broken.
- When working with electric portable tools, especially when in damp places, check the insulation or extension cords. Also wear rubber shoes.
- Disconnect electrical service to electrical driven machinery and tag as "do not operate"
- Before using an extension cord make sure there are no breaks in the insulation and that the plug socket and lamp guard are in good condition.
- Never use an extension cord in the place of permanent wiring.
- Voltages lower than 110 will cause death under certain conditions.
- Never pull on the cord.

Heat Stress

Because the climate at College of the Mainland is conducive to heat related illness, people must take preventive measures to reduce their risk. To prevent heat stress, employees should limit strenuous physical activity during the hottest portion of the day, wear a brimmed hat when in the sun, take frequent breaks, and drink plenty of fluids. Heat stress occurs in two forms: heat exhaustion and heat stroke. Please refer to (*Appendix B*) for more information on Heat Exhaustion and Heat stroke.

Dress Code

Dress in a manner that does not impair safety. Loose clothing, long hair, dangle jewelry, and sandals may be dangerous around moving equipment. Always wear clothing that is appropriate for your job.

Personal Protective Equipment

Personal Protective Equipment (PPE) includes all clothing and work accessories designed to protect employees from workplace hazards. Protective equipment should not replace engineering, administrative, or procedural controls for safety; it should be used in conjunction with these controls.

Employees must wear protective equipment as required and when instructed by the Safety and Environmental Health Office.

If you need assistance in determining if (or what type of) PPE is need, please contact the Safety & Environmental Health Office at (409) 933-8407 Ext.8407.

OFFICE SAFETY

General Office Safety

Common causes of office accidents include the following:

- Slipping, tripping, and falling hazards
- Burning, cutting, and pinching hazards
- Improper lifting and handling techniques
- Improper office layout and arrangement
- Dangerous electrical wiring
- Exposure to toxic substances
- Horseplay

Refer to other sections in this manual, such as General Safety, Fire Safety, and others for more information on office safety.

Good Office Housekeeping Practices

By keeping the office floor both neat and clean, you can eliminate most slipping, tripping, and falling hazards.

Other good housekeeping practices include the following:

- Ensure that electrical cords and phone cords do not cross walkways or otherwise pose a tripping hazard.
- Do not run cords underneath carpet, and avoid the use of tape whenever possible.
- Report or repair tripping hazards such as defective tiles, boards, or carpet immediately.
- Clean spills and pick up objects off the floor immediately.
- Keep office equipment, facilities, and machines in good condition.
- Store items in an approved storage space. Do not stack boxes too high.
- Clearly label boxes with their contents.
- Keep all drawers and cabinet doors closed when unattended.
- Arrange office furnishings in a manner that provides unobstructed areas for movement.
- Keep stairs, steps, flooring, and carpeting well maintained.
- Secure throw rugs and mats.
- Do not place wastebaskets or other objects in walkways.

Chemical Hazards

Many common office chemicals can cause injuries if improperly used, stored, or disposed. To guarantee the safe use, storage, and disposal of the chemicals in your office, always review the Material Safety Data Sheet (MSDS) and/or container label for important information.

Cuts and Punctures

Follow these guidelines to help reduce the chance for cuts and punctures:

- Be careful when using knives, scissors, staplers, letter openers, and box openers. Any of these items could cause a serious injury.
- Avoid picking up broken glass with your bare hands. Wear gloves and use a broom and a dustpan.
- Place used blades, broken glass, or other sharp objects in a rigid container, such as a box, before disposing in a wastebasket.

File Cabinets and Shelves

Safety guidelines for file cabinets:

- Secure file cabinets that are not weighted at the bottom.
- Ensure that file cabinet drawers cannot easily be pulled clear of the cabinet.
- Do not block room ventilation grates with file cabinets.
- Open only one drawer at a time to keep the cabinet from toppling.
- Close drawers when they are not in use.
- Do not place heavy objects on top of cabinets.
- Be aware that anything on top of a cabinet may fall off if a drawer is opened suddenly.
- Close drawers slowly using the handle to avoid pinched fingers.
- Keep the bottom drawer full. This will help stabilize the entire cabinet.
- Ensure shelves are secured.
- Place heavy objects on the bottom shelves. This will keep the entire structure more stable.
- Maintain 18 inches between top shelf items and the plane of the fire suppression sprinkler heads. In non-sprinkler areas, 24 inches must be maintained from top shelf items and the ceiling.
- Never climb on shelves (even lower shelves). Use an approved ladder or stepstool.

Desks

Safety guidelines for office desks:

- Keep desks in good condition (i.e., free from sharp edges, nails, etc)
- Ensure that desks do not block exits or passageways.
- Ensure that glass-top desks do not have sharp edges.
- Ensure that desks with spring-loaded tables function properly. The table should not spring forth with enough force to cause an injury.
- Do not climb on desks. Use an approved ladder or stepstool.
- Keep desk drawers closed when not in use.
- Repair or report any desk damage that could be hazardous.

Chairs

Safety guidelines for office chairs include the following:

- Do not lean back in office chairs, particularly swivel chairs with rollers.
- Never climb on a chair. Use an approved ladder or stepstool.
- Office desk chairs should have adjustable back supports and seat height.
- Take care when sitting in a chair with rollers. Make sure it does not roll out from under you when you sit down.
- Repair or report any chair damage that could be hazardous.
- Do not roll chairs over electrical cords.

Ergonomics and Work Station Arrangements

Ergonomics involves adjusting work processes or stations to fit a particular employee. Improper ergonomic design can cause debilitating long-term musculoskeletal effects.

Suggestions for maintaining an ergonomic work atmosphere:

- Stay in good physical condition.
- Take "mini" breaks and stretch intermittently in both sitting and standing positions.
- Change tasks frequently
- Adjust your computer screen to limit glare and take frequent vision breaks away from your computer to allow your eyes to relax.
- Keep items frequently used in close proximity to you.
- Maintain good posture and use a chair with adequate support to adjust your upper extremities to a neutral position.
- Be aware of cumulative trauma disorder warning signs such as tingling, numbness or burning pain in fingers, hands, arms, wrists and shoulders.

Space Heaters

The use of portable electric space heaters should always be a last resort. If your workspace is too cold, your first action should always be to report the problem to the Physical Plant.

The following apply when using portable electric space heaters:

- Use only for the purpose for which they are designed (refer to manufacturer's labeling and recommendations)
- The heater must be Underwriters Laboratory or Factory Mutual approved.
- The space heater must have a device that automatically turns the unit off if tipped over and when the room is warmed.
- Keep the heater in a stable, upright position with at least 36 inches of space between the front of the unit and any other surface.
- Never operate the heater in a closed area, such as beneath desks.
- Check the cord to make sure it is not frayed or worn.
- If an extension cord is needed, use only one that is rated to handle the heater's electrical load.
- Always unplug heaters when you leave the room when they are not in use.
- Do not overload electrical circuits.

For more information concerning Office Safety, please contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407

Physical Plant Safety

General Shop Safety

It is not possible to detail all the risks involved with shop work. However, it is possible to foresee many hazards by carefully planning each job.

Follow these guidelines for general shop safety:

- Know the hazards associated with your work.
- Be sure you are fully educated on the proper use and operation of any tool before beginning a job.
- Always wear appropriate safety gear and protective clothing.
- Ensure that there is adequate ventilation to prevent over-exposure from vapors, dust, and fumes.
- Maintain good housekeeping practices.
- Keep the work area free from slipping/tripping hazards (oil, cords, debris, etc.).
- Keep tool and equipment guards in place.
- Know where fire extinguishers are located and how to use them. Do not obstruct them.
- Make sure all tools and equipment are properly grounded and that cords are in good condition.
 - Double-insulated tools or those with three-wire cords are essential for safety.
 - Use extension cords that are large enough for the load and distance.
- Secure all compressed gas cylinders.
- Never use compressed air to clean clothing or skin.
- Take precautions against heat stroke and heat exhaustion.

Lockout/Tagout (LOTO)

The key to protection from energy sources is a proper lockout/tagout procedure.

- Do not service or perform maintenance on machines or equipment until all forms of energy are properly controlled.
- Before beginning a lockout/tagout procedure, affected staff and equipment operators must be informed of the maintenance or repair activities that you will be doing.
- Be certain to include the length of time you expect the work to take. If there are shift changes, make sure others who may be affected are informed.
- Only the person who places a lock and tag may remove it.
- When more than one operation is being conducted on the same equipment, a lock must be applied for each operation.
- It is important that persons working in the area of a lockout/tagout operation understand and acknowledge the locks and tags.

Confined Space

A confined space is any area which:

- Is large enough and shaped so that a person can enter and perform work.
- Not designed for continuous human occupancy.
- Has limited or restricted openings for entry or exit.

Most confined spaces are actually or potentially hazardous.

These confined spaces require work permits because they have one or more of the following:

- Contain or has the potential to contain a hazardous atmosphere.
- Material that could engulf workers.
- Internal structure of contents that could trap or asphyxiate workers.
- Other recognizable hazards.

Entry into Confined Spaces, can present many safety & health hazards if proper procedures and special preparation are not performed.

Prior to any entry into a Confined Space, Entry permits must be obtained and employees must receive special training.

For additional information on Confined Space Entry, please contact the
Safety & Environmental Health Office at
(409) 933 - 8407 Ext. 8407

Machinery and Machine Guarding

Moving machine parts must be safeguarded to protect operators from serious injury. Belts, gears, shafts, pulleys, flywheels, chains, and other moving parts must be guarded if there is a chance they could come in contact with the operator or a bystander.

Guards must be in place.

- If you notice that a guard is missing or damaged, have the guard replaced or repaired before beginning work.
- If a guard must be removed to perform maintenance or repairs, follow lockout/tagout procedures.
- Replace guard before placing in service.

Hand Tools/ Power Tools

When using hand tools, the following apply:

- Use the right tool to complete a job safely and efficiently.
- Wear appropriate protective equipment.
- When using knives, always cut away from your body.
- Keep knives and scissors sharp; dull tools can be more hazardous than sharp ones.
- Around flammable substances, use spark-resistant tools made from brass, plastic, aluminum, or wood.
- Replace or repair all wooden handles that are loose, splintered, or cracked.
- Do not use impact tools such as chisels, wedges, or drift pins that have mushroomed heads.
- Report any tools that are defective or in unsatisfactory condition to your supervisor.

Power Tools

In addition to the general shop guidelines, the following apply when working with power tools:

- Use the correct tool for the job. Do not use a tool or attachment for something it was not designed to do.
- Do not rely on strength to perform an operation. If undue force is necessary, you may be using the wrong tool or have a dull cutting edge.
- Select the correct bit, blade, cutter, or grinder wheel for the material at hand.
- Keep all guards in place. Cover exposed belts, pulleys, gears, and shafts that could cause injury.
- Always operate tools at the correct speed for the job at hand. Working too slowly can cause an accident just as easily as working too fast.
- Watch your work when operating power tools. Stop working if something distracts you.
- Before clearing jams, blockages, performing maintenance, or changing components on power tools, disconnect from power source or use appropriate lockout/tagout procedure.
- Do not use your hand to clear jams or blockages, use an appropriate tool.
- Never reach over equipment while it is running.
- Never disable or tamper with safety releases or other automatic switches.
- When the chance for operator injury exists, use a push stick to move material through a machine.
- Keep a firm grip on portable power tools.
- Keep bystanders away from moving machinery.

Ladders

When working with ladders, follow these guidelines for safe usage:

- Always inspect a ladder before you climb it. Make sure the steps or rungs are sturdy and the locking mechanisms are in good working order.
- Maintain ladders free of oil, grease, and other hazards.
- Use only for the purpose for which the ladder was designed (refer to manufacturer's labeling and recommendations).
- Carry ladders horizontally with the front end slightly higher than the back end.
- To open a stepladder, make sure the spreader is locked and the pail shelf is in position.
- Place ladders on a solid, level surface to ensure safety.
- Watch for overhead obstructions and power lines.
- Position a straight or extension ladder so that the base of the ladder is one foot away from the vertical support for every four feet of working ladder height (i.e., one foot out for every four foot up)
- Do not place the top of a ladder against a window or an uneven surface.
- When possible, tie the top of a straight or extension ladder to supports.
- An extension ladder used for access to a roof or elevated work platform must extend at least 3 feet beyond the support point.
- Do not place a ladder in front of a door unless you barricade and post a warning sign on the opposite side of the door.

When climbing or working on ladders:

- Wear shoes with slip-resistant soles and make sure they are dry before climbing.
- Never allow more than one person on a ladder, unless designed for such use.
- Always face the ladder when ascending or descending.
- Keep your body between the rails at all times.
- Have someone steady the ladder if it cannot be secured otherwise.
- Do not stand on the top four rungs of an extension ladder or the top two steps of a stepladder.
- 3 points of contact should be maintained with the ladder (for example, 2 feet/1 hand or 2 hands/1 foot).
- Carry tools in a tool belt or use a rope to raise and lower them so both your hands can grasp the rungs while ascending and descending a ladder
- Use a wooden or composite ladder if you must work near electrical sources. Never use a metal ladder when you or the ladder could contact exposed electrical parts.
- Never leave a ladder unattended in an area where it could obstruct egress or present potential injury.
- Remove damaged or unsafe ladders from service

Welding/Cutting/Brazing

The following items are guidelines to be used in most welding, cutting, and brazing procedures:

- Conduct hot work operations in designated areas free from flammable or combustible materials.
- Periodically check the work area for a flammable atmosphere.
- Take care to prevent sparks from starting a fire.
- Mark hot materials with a sign or other warning during hot work activities.
- Make sure reflective or combustible surfaces in the hot work area are removed or adequately guarded.
- Ensure that adequate ventilation and exhaust are available.
- Be aware of electrocution hazards, particularly in damp conditions. Be sure that electrical cords are properly grounded.

For additional information on shop safety please contact the Safety & Environmental Health Office at (409) 933-8407 Ext.8407.

GROUNDS MAINTENANCE

General Grounds Safety

Common landscaping accidents include the following:

- Cuts, lacerations, or amputations from whirling mower blades.
- Bruises or broken bones from flying projectiles.
- Burns from hot equipment parts
- Electrical shock from faulty grounding or defective electrical cords
- Back strain from improper equipment usage
- Slips, trips, and falls

Regardless of the type of landscape equipment you use, follow these basic guidelines to ensure safety:

- Read the equipment owner's manual.
- Use the right equipment for the job.
- Inspect the equipment before each use.
- Know how to control and stop the equipment quickly.
- Wear personal protection equipment, as necessary:
 - Eye protection
 - Hearing protection
 - Long pants
 - Safety shoes
 - Work gloves
- Never disable or bypass safety devices (blade stops, kill switches).
- Apply sunscreen to exposed areas of skin.
- Be careful to avoid fatigue and heat stress (refer to the General Safety section in this manual for more information):
 - Drink plenty of water
 - Take breaks
- Do not operate powered equipment if you are tired, sick, or taking medication.
- Take special precautions when working with electrical equipment.
- Do not smoke around gas-powered equipment.
- Allow hot equipment to cool before refueling.
- Make sure that all guards are in place and in good condition.

Mower Safety

Follow these general lawn mower safety guidelines for both riding and walk behind mowers.

- Wear sturdy shoes with good traction.
- Conduct a pre-mowing inspection of the lawn and remove any debris, rocks, limbs, or other items that could become a projectile. Look for concealed hazards such as holes.
- Keep hands and feet away from moving blades.
- Replace loud or faulty mufflers.
- Shut off the engine before unclogging, servicing, or adjusting the mower and before removing the grassbag. For added protection, remove the ignition wire before working on the machine.
- Do not bypass the safety device that stops the blade when the operator releases his/her grip on the handle.

Riding Mower Safety

In addition to the general guidelines for mower safety, follow these guidelines for riding lawn mower safety:

- Before starting the engine, make sure the transmission is out of gear and the mower blade clutch is disengaged.
- Never allow extra riders on the lawn mower.
- Slow down when turning and when working on slopes. Mow up and down slopes rather than across them.
- Never leave a running lawn mower unattended. Before leaving the seat, park the mower on a flat area, disengage the mower blades, and remove the ignition key.

Power Blowers

Follow these guidelines when operating a power blower

- Follow *all* manufacturers' safety precautions.
- Always wear hearing and eye protection.
- Always walk towards your work when using a power leaf blower.

Trimming Equipment

Follow these safety guidelines for trimming equipment such as hedge trimmers, string trimmers, grass shears, and edger's:

- Avoid rocks, debris, and gravel with trimming equipment.
- Eye and hearing protection must be worn.
- Walk towards your work. Do not back away from your work when using a trimmer.

General Pesticide Safety

To help reduce the hazards associated with pesticides (insecticides, herbicide) and fertilizers.

- Check all pesticide equipment before using it to ensure proper working condition.
- Read pesticide labels carefully. Follow the label directions when mixing, applying, storing, or disposing of pesticides.
- Wear personal protective equipment to prevent dermal, inhalation, and mucous membrane exposure.
- Do not eat, drink, or smoke when handling pesticides.
- Wash hands after use.
- Use caution when applying near bodies of water.
- Do not apply pesticides when rain is eminent or if wind could affect the spraying area.
- Rinse spray equipment and empty containers. Apply rise water to treated area.
- Properly dispose of empty containers.

For additional information on Grounds Safety, please contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407

CUSTODIAL SAFETY

General Custodial Safety

Common causes of Custodial accidents include the following:

- Slipping, tripping, and falling hazards
- Exposure to toxic substances
- Burning, cutting, and pinching hazards
- Improper lifting and handling techniques
- Dangerous electrical wiring
- Horseplay

Good custodial safety practices include the following:

- Make safety the first consideration in every situation.
- Every accident or injury, no matter how small, must be reported immediately.
- When picking up a load, evaluate whether or not you need help or special equipment.
- Learn location of fire extinguishers and know how to use them.
- Be aware of walking surfaces and their condition. Extra care may be required to prevent an accident.
- Do not reach too high for something that may fall on you. Use a ladder, or ask for help if you need it.
- Never leave an unsafe condition unguarded or unmarked, even temporarily.
- Always post "wet floor" signs when mopping floors.
- Chemicals and equipment should be stored in designated closets.
- Always check hand and power tools and electrical cords before using. Never use a tool or cord that is damaged or defective.
- Do not attempt to operate equipment that you are not familiar with.
- Wear adequate shoes with full protection of the heel and toes and slip-resistant soles.
- Appropriate Protective gear should be worn at all times.

Chemical Safety

- Before using any chemical make sure you have read the Material Safety Data Sheet and know how to use, store and dispose of it. (*Appendix A*)
- Follow any instructions and warnings.
- Never store chemicals in unlabeled or incorrect labeled containers.
- Know in advance what could go wrong and what actions to take.
- Use the correct protective clothing and equipment when appropriate.
- Never mix a chemical with another substance, unless instructed by the manufacturer's instruction.
- Chemicals and equipment should be stored in designated closets.

For additional topics concerning Custodial Safety, please refer to other sections in this manual, such as General Safety, Fire Safety and Physical Plant Safety.

Or contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.

LABORATORY SAFETY

General Lab Safety Guidelines

Laboratory safety involves chemical safety, fire safety, electrical safety and other safety issues.

This section applies to general laboratory safety; refer to other sections in this manual for more information.

Instructor or Laboratory Assistant must:

- The instructor or assistant shall be in the laboratory for the entire lab period.
- Set a good example by observing all rules and wearing protective equipment.
- Participate in appropriate safety and evacuation drills on a regular basis.
- Be alert for unsafe conditions.
- Conduct frequent and thorough inspections.
- Take effective corrective action promptly.
- Maintain discipline and enforce rules.
- Unauthorized visitors (including children) should not be allowed in the lab.
- Assume responsibility for authorized visitors and require that they follow the same rules as other laboratory workers and are escorted or supervised at all times.
- Ensure that the faculty, students, and staff have access to and understand the information on the appropriate MSDS's.
- Carefully review all procedures for possible health, safety, and environmental problems before any activity is undertaken.

Safety Equipment

Each person should know the exact location of all emergency equipment and its use. Instructors should orient students to the locations and use of emergency safety equipment, MSDS book and EXITS.

Emergency equipment generally available includes the following:

Fire extinguisher, safety showers, eye wash station, emergency exits, fire blankets, and first aid kits.

Personal Protective Equipment

Everyone in the laboratory must wear approved eye protection during lab period. **(must meet the ANSI Z87.1 standard.)**

Safe Laboratory Practices

To ensure laboratory safety, follow these practices:

- Know about the chemicals and hazards associated with your laboratory.
- Know what to do in different emergency situations.
- Know how to read and interpret MSDS (*Appendix A*)
- Wear personal protective equipment, as appropriate.
- Follow safe practices for working with chemicals.
- Do not wear contact lenses around chemicals, fumes, dust particles, or other hazardous materials.
- Never leave work unattended.
- Avoid working alone in a laboratory.
- Use extreme care when working with needles, blades, and glass.
- Do not eat, drink, or use tobacco products in the laboratory.
- Do not pipet anything by mouth.
- Clean spills immediately using approved methods.
- Keep laboratory doors closed.
- Decontaminate all affected equipment.
- Exits must be kept clear.
- Wash hands before leaving the laboratory.

For more information on Laboratory Safety please contact the Safety & Environmental Health Office at (409) 933-8407 Ext. 8407.