



Texas A&M Forest Service Safety Manual

General Hazard Safety

This safety manual covers general everyday hazards and provides guidance on programs not otherwise covered in another manual or reference. This safety manual does not seek to provide step-by-step instruction but serves as a guide, thus providing leaders the latitude to develop best practices for their unit. Employees should refer to and follow the specific procedures and precautions in accordance with their specialized training, when a specialized course exists.



Safety Manual—General Hazards

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Safety Manual—General Hazards

PURPOSE

This manual is designed to give Texas A&M Forest Service employees and leaders a reference manual to use in the safe planning and execution of their duties. Where duties are covered by already existing guidelines or manuals, the user is referred to those documents for more specific guidance. While on emergency response, employees must follow the agency State Fire Operations Plan and the Incident Action Plan(s).

CONTACT INFORMATION

Environmental Health and Safety (EHS) Officer: (979) 458-6697 or safety@tfs.tamu.edu
Employee Development (ED): (979) 458-6690 or EmployeeDevelopment@tfs.tamu.edu

COMPLAINT PROCEDURE

The chain-of-command is the primary venue for voicing and correcting workplace safety and health concerns. If the chain of command does not adequately address employee concerns, contact the EHS Officer.

RESPONSIBILITIES

Leader Responsibilities:

- Establish a climate that ensures the following:
 - No employee is required to work in hazardous conditions without proper training.
 - Inspections of the workplace are periodically performed.
 - Equipment and tools are inspected before use.
 - Employees are provided with the appropriate personal protective equipment (PPE).
 - Job hazard assessments are conducted—where needed.
 - Supervisors consider the effects of heat stress on employees when planning work.
 - Labels are placed on hazardous material containers.
 - Annual inventory of hazardous chemicals are conducted.
 - Warning signs are posted.
 - Safety Data Sheets (SDSs) are available to all employees.

Employee Responsibilities:

- Notify supervisor and others of any unsafe conditions of which they may not be aware.
- Participate in assigned safety training.
- Use provided safety devices and safety equipment.
- Do not use tools and equipment that are defective or without being trained.
- Behave safely and responsibly in the workplace.
- Manage all hazardous material in accordance with the applicable Safety Data Sheet.
- Follow the warnings on all medications and inform supervisors if abilities are affected.
- Always be prepared to work in both hot and cold environments.



ASBESTOS

Do not remove or disturb asbestos containing building material (ACBM) unless properly trained and certified through a program approved by the [Texas Department of State Health Services](#) (DSHS). All Asbestos work will comply with DSHS. Asbestos may be in the following mediums:

- floor adhesives and mastics
- ceiling tiles
- duct work
- floor tiles
- insulation
- lab vent hoods
- vented enclosures

Report any damage to potential ACBM to the EHS Officer and immediate supervisor. Do not further disturb the material.



BIOLOGICAL HAZARDS

Biohazards are biological substances in the work environment that may present a hazard to employees. Biological substances include:

- Infectious and parasitic agents
- Non-infectious microorganisms such as some plants and plant products

Examples of biohazards that may affect employees are:

- Infectious microorganisms from ticks and mosquitoes
- Toxic biological substances from stings and bites
- Allergens from plants

Employees should be periodically trained on the hazards common to their region of Texas.

Topics of training should include the following information:

- The biological hazards that may be encountered.
- Control measures that exist to prevent exposure, i.e., PPE, repellants, and creams.
- Work practices that can reduce the likelihood of exposure.
- Actions to take in the event of exposure.

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CONFINED SPACES

Confined spaces are a space that is large enough for employees to enter, has restricted means of exit, has unfavorable ventilation, and is not designed for continuous occupancy. Examples of confined spaces include:

- Tanks
- Trenches
- Sewers

Criteria that must be followed before entry into a confined space includes:

- Entry supervisor must be trained in confined space assessment and entry planning.
- Entry party must be trained in confined space rescue and possess rescue equipment.
- All hazards must be shut off using proper lock-out/tag-out practices (see section on lock-out/tag-out).
- Trenches must be shored up to prevent collapse (see section on excavation).
- The following atmospheric conditions require an entry permit from the EHS Officer.
 - Atmospheres below 19.5% or above 24% Oxygen
 - Gases that exceed permissible exposure limits or create a flammable atmosphere

Coordinate with the EHS Officer for confined space training, detection devices, or entry permits.



ELECTRICAL SAFETY

All electrical work should be performed by a qualified electrician and comply with applicable building codes. Steps to follow before working on an electrical circuit:

- Shut off power and safeguard the source using lock-out/tag-out practices (see section on lock-out/tag-out).
- Test the circuit with a voltage meter to ensure it is de-energized.

Electrical Generators

- Only trained personnel should perform maintenance above the operator level.
- Grounding rods must be used when operating any electrical generator.

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Extension cords

Extension cords may not be used as a permanent means of providing an electric source. Remove extension cords from service when any of the following damage exists:

- Internal wires are visible from wear, fraying, or the cord is cut.
- Any damage to the 3-prong connectors.
- To remove a damaged extension cord from service, cut it in half and dispose of it.



EXCAVATION

Excavation work is digging or trenching to a size where a person may enter the dug-out portion and be exposed to hazards from collapsing walls or gases. Steps to follow when excavating:

- Call 811 before you start digging. You will be asked for the location and description of the project. The utility companies will locate and mark the approximate location of utility lines within 48 hours. Once lines have been marked, you can begin to carefully dig, taking care to avoid damage to the marked lines.
- Have a competent person evaluate the excavation site. A competent person is one who can identify potential hazards in the excavation site through training or experience.
- Conduct a daily inspection of the excavation and the adjacent areas prior to work and as needed during the workday.
- Mark excavations into which a person could fall or trip with “Do Not Enter” construction tape.
- If employees will enter the excavation:
 - Follow confined space guidance (see section on confined spaces).
 - Monitor for hazardous conditions such as vibration, weather, and ground water.
 - Periodically inspect protective material or equipment for any damage.
 - Protect employees from cave-ins with an adequate protective system.
 - Place excavated material at least two feet from the edge of the excavation.



EXCESSIVE NOISE

Excessive noise levels may exist when operating equipment or machinery. Exposure to abnormal noise levels could result in a gradual loss of hearing which may not be noticeable to the individual. When working with loud noises or operating any machinery, employees should wear hearing protection. An employee who suspects they are exposed to excessively high noise levels should inform their supervisor and the EHS Officer for a workplace hazard assessment.

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FALL PREVENTION

It is everyone's responsibility to report or correct hazards that cause slips, trips, and falls. Active steps that may be taken to prevent them include:

- Ensure steps and stair wells have handrails.
- Treat slippery surfaces with non-slip material.
- Immediately clean up spills and employ the use of wet surface signs to warn others.
- Do not stand or climb on desks, chairs, or other unstable surfaces to reach for an object.

Ladder Safety

When using ladders, employees must ensure they are suitable for use, considerations include:

- Inspect the ladder before use.
- Wear nonslip footwear.
- Use three points of contact.
- Review www.laddersafety.org for more information on the type of ladder being used.

Elevated Work

- Use fall prevention measures when working at an elevation greater than six feet. Measures may include the use of:
 - Ropes, harnesses, and anchors
 - Rails

Coordinate with the EHS Officer for a hazard assessment or fall prevention training.



FIRE PREVENTION AND RESPONSE (WORKPLACE)

Agency facilities are subject to inspections by the Texas State Fire Marshall's Office. Coordination of those inspections is centralized with the EHS Officer.

Flammable and Combustible Material

Do not store or collect excessive amounts of flammable material, such as:

- Paper and cardboard products
- Used oils
- Old fuel and paint



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Guidelines to follow for storing combustible and transporting flammable material:

- Store paper products away from ignition sources.
- When stored, keep fuel and oily rags in a metal container with at least a 1-hour fire rating.
- When transporting fuel, use an approved container that is properly secured in the vehicle.

Fire Extinguisher Selection and Placement

Follow these guidelines for selecting, inspecting, and placing fire extinguishers:

- Have a designated employee check fire extinguishers fill gauge monthly.
- Have a qualified technician check fire extinguishers annually.
- Select the fire extinguishers based on the hazard type and activity:
 - Stored cardboard, wood, and paper—Class A (Water)
 - Working with fuels, oils, and solvents—Class B (powder) or Purple K (CO₂)
 - General hazards—ABC Type (Powder)
- Place fire extinguishers according to the hazard type:
 - Specific Hazard—within fifty feet of the hazard
 - General hazard—every seventy-five feet, preferably at facility exits
- In vehicles, fire extinguishers must be transported in a durable metal mount.

Responding to a Workplace Fire

Employees must be trained in the proper employment and use of portable fire extinguishers if they are expected to use them. When deciding whether to fight a facility fire or evacuate consider the following:

- If sprinklers are installed, rely on them to put out the fire.
- Do not fight fire alone.

When attempting to extinguish workplace fires follow these steps:

- Identify an escape route with no obstructions.
- Ensure there is nothing that can ignite and close the escape route.
- Stand 6-8 feet from the fire and use the acronym PASS:
 - Pull the pin out.
 - Aim low at the base of the fire.
 - Squeeze the lever to discharge contents.
 - Sweep from side to side.
- Disengage and exit if fire flares up.

Outbuildings

Offices that have non-public accessible outbuildings with hasp style locks will lock the padlock onto the latch in the open position when in use. Once the building is empty, the lock can be returned to its normal position. The local supervisor will make sure that office staff are trained in this procedure.



FIRST AID

Working in the wildland can be hazardous; isolation from emergency medical services increases the likelihood that an injury can quickly become life threatening. Therefore, employees who do not otherwise hold a medical qualification should attend a first aid and CPR course.

First Aid Kits

First aid kits will be available at every remote work site. Kits should contain bandage material suitable for injuries associated with the task being performed, as well as the following:

- Scissors
- Radiant barrier blanket or “space blanket”
- Tweezers
- Resuscitation equipment such as a pocket mask
- Splint or splint material

First Aid kits are available for purchase thru the GSA Advantage website. Offices wishing to purchase kits should coordinate with the EHS Officer.

Medical Guidelines

Employees who are trained in first aid and CPR should not hesitate to deliver care to a fellow employee under the following guidelines:

- Be prepared through inoculation for Hepatitis B Virus (HBV).
- Call 911, if necessary, before providing care.
- Seek permission from responsive victims before providing care.
- Only provide the care you are trained to provide.
- Avoid unnecessarily moving victims of falling or trauma accidents.
- Follow bloodborne pathogen (BBP) prevention steps in the [BBP Exposure Control Plan](#).
- Report exposure to blood from others using the [Preliminary Report of Injury](#).

Contact the EHS Officer about HBV inoculations.



HEAT-RELATED ILLNESSES

Heat-related illnesses (heat cramps, heat exhaustion and heat stroke) are most likely to occur when it is hot and humid but can occur in any environmental condition.

Risk Factors

Any combination of the following conditions can cause heat illnesses:

- Elevated temperatures
- Humidity
- Direct sun exposure
- No breeze or wind
- Low fluid intake
- Heavy physical labor
- No recent exposure to hot working conditions

Heat Cramps

- Signs/Symptoms:
 - Sweating
 - Dehydration
 - Transient muscle cramps
- Treatment:
 - Place in shade
 - Loosen clothing and stretch muscles
 - Slowly give fluids
 - Monitor

Heat Exhaustion

- Signs/Symptoms:
 - Profuse sweating with cool, clammy skin
 - Dehydration
 - Persistent muscle cramps
 - Dizziness and headache
 - Decreased urine output
- Treatment:
 - Place in shade
 - Loosen clothing and stretch muscles
 - Slowly give fluids
 - Monitor, medically evacuate to hospital if no improvement

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Heat Stroke

- Signs/Symptoms:
 - Hot, dry skin
 - Rapid, weak pulse (100-120 at rest)
 - Hyperventilation
 - Vomiting
 - Involuntary bowel movement
 - Dizziness, confusion, and irritability
 - Seizures or loss of consciousness
- Treatment:
 - Cool body as quickly as possible with water
 - Loosen clothing and stretch muscles
 - Slowly give fluids
 - Medically evacuate to hospital IMMEDIATELY

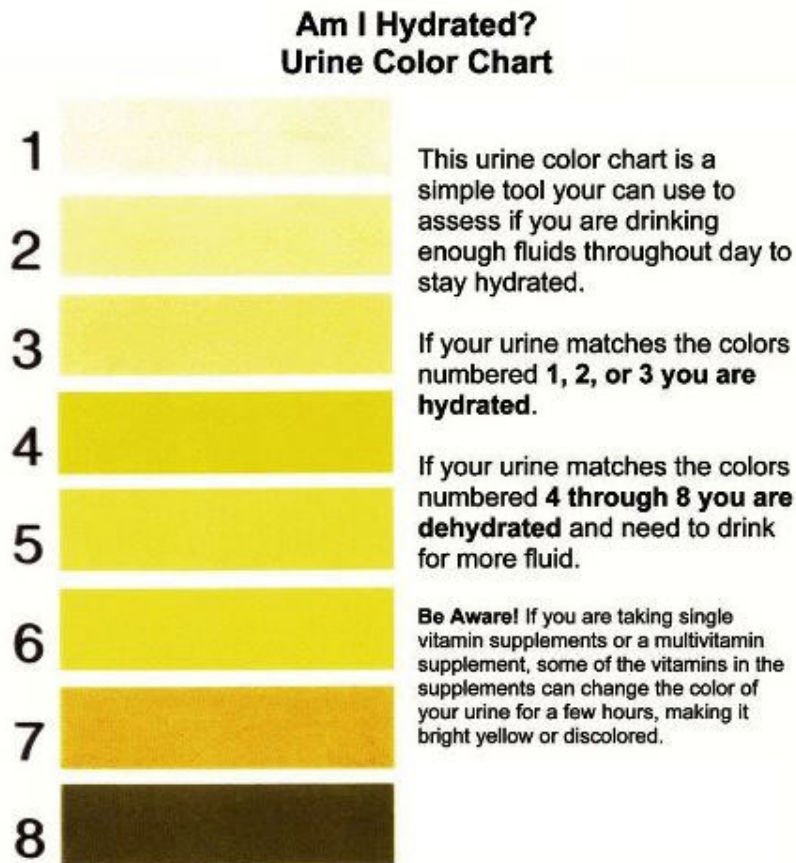
Prevention

- Know the signs and symptoms of heat illness and how to prevent them.
- Drink plenty of fluids often and before you are thirsty. Drink fluids frequently when working outside.
- Avoid beverages containing alcohol and caffeine.
- Take frequent rest breaks with water in shaded or air-conditioned areas.
- Routinely check all employees who are at risk for heat illnesses. Use buddy system when necessary.
- Wear lightweight and light-colored clothing.
- Be aware of any physical conditions or medications being taken that might impact tolerance to heat. If under treatment by a physician, ask your doctor if you can work in the heat.

Dehydration and Urine Color

The following dehydration urine color chart will help you use your urine color as an indicator of your level of dehydration and what actions you should take to help return your body back to a normal level of hydration.

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FORKLIFTS

Forklift (aka Powered Industrial Truck) operators must be trained before operation. The agency uses a training program developed by Forklift Academy, Inc. which is delivered by employees qualified as forklift trainers. The training is valid for three years. To be recertified, an operator does not need to complete the whole course but must pass a hands on evaluation. To coordinate a class contact the Planning and Preparedness Department's internal training section.

Forklift operators will follow the pre-operational inspection procedures as outlined in the certification training. In addition, operators will follow these procedures to ensure proper and safe operation of the forklift:

- Correct deficiencies before use or operation.
- Do not operate a forklift without an overhead protective structure installed.

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- Use seat belts or other restraints when installed.
- Ensure the lift and controls are operating properly before attempting any work.
- Always operate the forklift in a safe manner, keeping the load under control.
- Be especially cautious when operating where vision is limited.
- Do not permit passengers to ride on equipment.
- Refuel forklifts in a well-ventilated area with the engine turned off.
- Do not allow smoking or open flames in the refueling or battery recharging area.
- Properly secure forklifts at the end of the work shift.
 - Lower forks to the ground
 - Set parking brakes or place chock blocks



HAND TOOLS

The following guidelines are intended to protect employees from the common injuries associated with hand and power tools:

- Attend tool specific safety course before operation, e.g., S-212 for chainsaws.
- Use suitable PPE based on the hazards present.
- Inspect power tools before each use.
- Inspect manufacturer installed guards before each use and do not remove guards.
- Repair defective tools before use; if unable to be repaired then tag “DO NOT USE”.
- Ensure that impact type tools such as pins and chisels are not mushrooming at the head.
- Ensure that wooden handled tools are not cracked or splintered and are tight on the tool.
- Ensure that bench grinders have a safety guard installed.
- Ensure that circular and table saws have automatically returning blade guards.



HAZARD COMMUNICATIONS (HAZCOM)

Hazardous Chemicals

Hazardous chemicals are substances with one or more of the following hazardous properties:

- **Physical Hazards:** combustible, flammable, explosive, reactive, and pressurized gases.
- **Health Hazards:** toxic, carcinogenic, corrosive, irritant, or sensitizer.

Warning Labels

Chemical manufacturers are required to ensure that container labels have pictograms, a signal word, hazard and precautionary statements, the product identifier and supplier information. Agency offices should ensure that hazardous chemicals they receive are appropriately labeled (see sample label).

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HS85

Batch number: 85L6543



Warning

Harmful if swallowed

Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product.
Dispose of contents/container in accordance with local, state and federal regulations.

First aid:

If swallowed: Call a doctor if you feel unwell. Rinse mouth.

GHS Example Company, 123 Global Circle, Anyville, TX 778XX

Telephone (888) 888-8888

Safety Data Sheets (SDSs)

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide SDSs to communicate the hazards of hazardous chemical products. SDSs are presented in a uniform format, and include the section numbers, the headings, and associated information under the headings as shown in the table below:







Section 1 - Identification	Section 9 - Physical and chemical properties
Section 2 - Hazard(s) identification	Section 10 - Stability and reactivity
Section 3 - Composition/ingredients	Section 11 - Toxicological information
Section 4 - First-aid measures	Section 12 - Ecological information
Section 5 - Fire-fighting measures	Section 13 - Disposal considerations
Section 6 - Accidental release measures	Section 14 - Transport information
Section 7 - Handling and storage	Section 15 - Regulatory information
Section 8 - Exposure controls/PPE	Section 16 - Other information

Public employers in Texas are required to keep a current SDS for every hazardous chemical they have on site regardless of the quantity of the chemical. SDSs must be readily available during each work-shift to public employees at each workplace. SDSs may be maintained in electronic form if they are available during the same work shift in which they are requested, and available to emergency responders as soon as practical upon request.

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Pictograms

Pictograms are used on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification:

Health Hazard  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	Flame  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	Exclamation Mark  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non Mandatory)
Gas Cylinder  <ul style="list-style-type: none"> • Gases under pressure 	Corrosion  <ul style="list-style-type: none"> • Skin Corrosion/ burns • Eye Damage • Corrosive to Metals 	Exploding Bomb  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
Flame over Circle  <ul style="list-style-type: none"> • Oxidizers 	Environment (Non-mandatory)  <ul style="list-style-type: none"> • Aquatic Toxicity 	Skull & Crossbones  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

Warning Signs

Offices should ensure that proper warning signs are displayed in areas where there may be air quality hazards from any of the following activities:

- Welding in poor ventilation.
- Indoor application of oil-based paints, stains, thinners, or adhesives.
- Grinding and sanding operations in unventilated areas when dust is created.
- Removal of asbestos containing material.

The person producing the hazardous environment is responsible for posting the warning signs. Assistance in identifying and procuring the signage and can be obtained from the EHS Officer.

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Annual Chemical Inventory

The following offices are required to maintain an inventory of hazardous materials using the [Work Area Chemical Inventory form](#) to be checked by the EHS Officer during the annual safety inspection:

- Maintenance shops
- Nurseries and orchards

All other offices should maintain a current inventory of the hazardous chemicals on hand and store them in a properly ventilated area of the workplace.

Hazardous Material Storage

Any material with a physical or health hazard will be stored away from employee workstations in accordance with the following guidelines:

- Flammable/Combustible material will be kept in a cabinet with a one-hour fire rating.
- Reactive material will be separated from any substance with which it may react.
- Pressurized gas cylinders will be affixed to a stable object by chain or strap. When not in use safety caps will be installed over the valve—if possible.
- Toxic and carcinogenic material may not be kept or stored in agency facilities.
- Corrosive material will be stored in an approved corrosive resistant container.
- Irritants and sensitizers will be stored away from workstations in a ventilated area.

HAZCOM Training

New employees are assigned *11020: Hazard Communication* in TrainTraq. Additionally, new employees must review their unit's SDS listing as part of the reception and integration plan and units should also provide training when a new hazardous substance is introduced.

Periodic hazardous substance training should cover the following information:

- Location of hazardous materials in the workplace
- Interpreting information on labels and SDSs
- Location of safety data sheets (electronically and in print form)
- Acute and chronic effects of chemicals
- Personal protective equipment
- Safe handling procedures
- Emergency procedures
- Spill clean-up material
- Waste disposal

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HEALTH HAZARDS

Suspected health hazards should be evaluated by trained personnel to determine if a hazard exists. If a hazard is found to exist, precautions will be taken to protect affected employees. Employees should know the safety precautions for any hazardous substance in their work area by reviewing the applicable SDS. Health hazards that may be encountered by employees include:

- Dusts - Asbestos and wood dusts
- Mists - Acid, oil, paint, or poisons
- Gases - Carbon monoxide from wildfires and Hydrogen Sulfide near active oil fields
- Vapors - Degreasing vapors
- Fumes - Metal fumes from welding, cutting, and soldering

Employees may be exposed to the toxic effects of these health hazards through ingestion, skin absorption, or breathing. Excessive exposure may result in an immediate—acute—affect or the effects could occur after years of continuous—chronic—exposure.

Employees who are concerned that a potential health hazard may exist should inform their supervisor. Supervisors are responsible for notifying the EHS Officer, so that an evaluation can be made, and appropriate steps can be taken to protect the employee(s).

The following steps should be taken by all employees to prevent injury when dealing with potentially hazardous materials:

- Do not work with hazardous materials until you have been trained.
- Know the symptoms of exposure to the substance.
- Take proper precautions to protect yourself and your fellow employees from exposure.
- Never mix cleaning compounds or other chemicals.
- Report any unusual symptoms to your supervisor or a medical provider immediately.



HOUSEKEEPING

Good housekeeping is essential in maintaining safe working conditions. Departments should take steps to minimize clutter. Some considerations for this purpose include:

- De-clutter working areas—shops, sheds, barns, storage areas, attics, and office areas.
- Safely store unneeded items, tools, and equipment.
- Keep walkways clear of any obstructions.
- Utilize local recycle programs.

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LOCK-OUT / TAG-OUT

The control of hazardous energy is required before service, repair, maintenance, or inspection of a potentially energized machine. All employees who will be working on equipment where the unexpected start-up or release of hazardous energy could cause injury must install a Lock-out / Tag-out safety device.

Lock-out

Lock-out is the process of blocking a power source from energizing an attached machine. Lockout is accomplished by installing a locking device at the power source or energy supply so that equipment cannot be operated. Once installed, locks and tags may only be removed by the person who applied it. If a lock-out device is required but not available, then contact the EHS Officer for procurement guidance.

Tag-out

Tag-out is accomplished by placing a tag on the power source. Tags must clearly state “DO NOT OPERATE.”

Coordinate with the EHS Officer for lock-out / tag-out training.



MACHINE GUARDING

Safeguards on machines are designed to protect employees from injury. To reduce the potential for injury, follow these basic rules:

- Safeguard any machine part, function or process which may cause injury.
- Never start a machine unless you have been trained on use of the machine.
- Never start a machine without required PPE.
- Do not wear loose clothing, neckties, rings, or other jewelry.
- Tie back long hair.
- Never start a machine unless guards are in place and in good condition.
- Treat a machine missing safety guard as if it were out of order; tag “Do Not Use.”
- Report all missing guards to your supervisor immediately.
- Guards, barriers, and enclosures may only be adjusted or removed by trained personnel.
- Never perform maintenance on a machine without disconnecting power and using lock-out/tag-out procedures, if deemed necessary (see previous section).



MEDICAL SURVEILLANCE

Medical surveillance is the assessment of employees exposed to occupational hazards. Employees who work with hazardous substances or in hazardous environments may need specialized PPE and periodic medical surveillance. Employees working with any of the following should contact the EHS Officer:

- Toxic chemicals
- Infectious diseases
- Airborne hazards

Employees who may also require periodic medical surveillance include:

- Employees required to complete the [Wildland Firefighter Medical Clearance Form](#)
- Emergency response employees seeking Hepatitis B Virus (HBV) inoculations

Any employee who is required to obtain medical surveillance should use their insurance and seek reimbursement of the co-pay from their department. Employees will be paid the co-pay amount equal to what the agency's insurance provider would charge for the type of service obtained.



MOTOR VEHICLE OPERATION

These guidelines apply to the operation of agency vehicles, including All-Terrain Vehicles (ATV), Utility-Terrain Vehicles (UTV) and Commercial Motor Vehicles (CMV).

Emergency Response Vehicles and Equipment

For guidelines on emergency response driving and inspection of emergency response vehicles and equipment (i.e., Transport trucks, dozers, fire engines, etc.), refer to the agency State Fire Operations Plan.

ATV/UTV Operations

- ATVs are limited to a single rider. Passengers are prohibited (even if the ATV is designed for two riders).
- UTV passengers are limited to the number of seats installed by the manufacturer. The operator and passenger(s) must use seatbelts while the UTV is in motion.
- Operators must use required PPE while loading/unloading ATV/UTV.
- Cargo loads must be loaded and secured as to not affect the vehicle's center of gravity and must not exceed manufacturer's recommendations for maximum carrying capacity.



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- When transporting external fuel containers with an ATV/UTV, a 5 lb. Class BC fire extinguisher must be secured to the UTV/ATV.

Head Protection

- ATV – A helmet that meets Snell or Department of Transportation standards must be worn at all times during ATV operations (on and off the Fireline).
- UTV – A hardhat meeting NFPA 1977 standards must be worn with chin straps secured in place under the chin.

Defensive Driving

Budgeted and seasonal employees must take a state approved defensive driving course (DDC) every five years. A course is offered thru TrainTraq and assigned to new employees at New Employee Orientation.

Vehicle Maintenance & Repairs

The responsible person for each vehicle is to ensure that vehicle deficiencies are promptly addressed for the safe operation of the vehicle. Vehicles should not be operated with a significant deficiency.

Communications Devices

Use of communications devices while driving may, at times, be necessary but should be avoided when possible.

- Federal regulations allow texting while driving by drivers of a CMV, when necessary, to communicate with law enforcement officials or other emergency services (*49 CFR Part 392, Subpart H, paragraph 392.80 (d) Emergency exception.*). However, the agency prohibits employees from texting or emailing while operating agency vehicles unless the exception criteria is met.
- CMV drivers are not allowed to hold a mobile telephone to conduct a voice communication or dial a mobile telephone by pressing more than a single button when driving (*Texas Commercial Motor Vehicle Drivers Handbook, June 2014, pg. 1-6*). However, using a hand-held mobile telephone is permissible by drivers of a CMV, when necessary, to communicate with law enforcement officials or other emergency services (*49 CFR Part 392, Subpart H, paragraph 392.82 (c) Emergency exception.*).
- Conversations on phones or radios should be kept to a minimum. Drivers should pull over, when safe to do so, for extended conversations.

Fatigued Driving

Driving while fatigued, ill, or on medication significantly increases the likelihood that an accident will occur. Employees should follow these guidelines or obtain approval from their immediate supervisor before deviating from them:

- Do not operate a motor vehicle after 14 consecutive hours on duty.

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- Do not exceed 11 hours of driving time in a day.
- Avoid operating vehicles during the normal sleep cycle (11 pm to 4 am).

Approval to deviate from these guidelines' rests with the employee's leadership who should consider any factor that could mitigate the increased risk. Considerations should include:

- Employee's demonstrated ability to cope with the rigors of long-distance driving.
- Employee's workload or time off in the preceding three days.
- Employees should be paired up and share the driving wherever possible.

Vehicle Backing

Backing accidents are the top cause of motor vehicle collisions. Whenever possible, position the vehicle so that backing will not be necessary. If a vehicle must be backed, drivers should:

- Visually check behind and the passenger side of the vehicle before backing up.
- Maintain situational awareness while backing up.
- When necessary (e.g., when in areas where you do not have a full view of the backing path), request another employee to act as a signal person.



OFFICE SAFETY

Following accepted safe work practices in the office setting will prevent most accidents from occurring. The basic safety rules to follow in the administrative setting include:

- Avoid running in the office.
- Immediately clean up spills.
- Avoid carrying stacks that obstruct vision.
- Use handrails when using stairways.
- Avoid standing on a chair or other unstable surface to reach for an object.
- Avoid sitting on the edges of desks, tables, boxes, or filing cabinets.
- Place wastebaskets and similar objects where they will not be a tripping hazard.
- Wear shoes that are compatible with the task being performed.
- Keep fingers away from the sharp edge of paper cutters.
- Do not indulge in horseplay.
- Wear shoes at all times.

Ergonomics

The workstation is the most hazardous location in most administrative settings. It is important to use good posture to prevent musculoskeletal disorders (MSD). MSDs are a category of injury that affects the muscles and tendons. When there is a mismatch between the requirements of the job and the ability of the worker, MSDs may result. Report any discomfort that lasts more than a

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week. Contact the EHS Officer for an in-office ergonomics assessment. Measures to prevent MSDs include:

- Sit with the lower back against the chair, the upper legs parallel to the floor, and with the feet flat on the floor.
- If the feet will not rest flat on the floor with the seat height properly adjusted, use a footrest.
- Adjust the chair so that the elbows are bent at right angles and the forearms are approximately parallel to the floor.
- Keep wrists straight by using a wrist rest that is the same height as the keyboard.
- Place the mouse on a surface close to and at the same height as the keyboard.
- Position the monitor directly in front, approximately an arm's length away, with the top of the screen at or slightly below eye level.
- If possible, tip the monitor back at an angle like that used when reading a book.
- Use a document holder to position work at eye level and close to the screen.
- Adjust the room lights and monitor to prevent glare or use an antiglare filter.
- When performing tasks involving repetitive motions or awkward positions, take periodic breaks or alternate with other tasks.



PERSONAL PROTECTIVE EQUIPMENT (PPE)

Leaders should periodically review tasks assigned to their subordinates to ensure they have and use the appropriate PPE. General hazard PPE includes:

Head Protection – is worn when there is a danger of head injury from impact and falling or flying objects.

Hearing Protection – is used to protect employees from noise when engineering controls cannot reduce noise to acceptable levels.

Eye and Face Protection – is worn when exposed to hazards such as flying particles, molten metal, dust, chemicals, gases, steam, vapors, radiating heat, or other potentially harmful exposures which may cause injury to the eye or face.

Respiratory Protective Equipment – may be assigned as part of a respiratory protection program when required to protect employees from airborne contaminants which, when measured, are above the NIOSH permissible exposure limits.

Foot Protection – is worn to protect employees working in areas where there is a danger of foot injury due to falling objects, piercing through the sole, or where protection is needed against electrical or chemical hazards.

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Hand Protection – is worn to protect employees from physical, chemical, or electrical hazards.

Contact the EHS Officer for assistance in assessing hazards beyond the supervisor's expertise.



SAFE LIFTING

Use the following guidelines to avoid back injuries:

- Do not place objects on the floor if they must be picked up again later.
- Use a cart or dolly to move heavy or awkward objects.
- Avoid overhead lifting; use a step ladder.
- Push rather than pull an object.
- Bend at the knees instead of the waist.
- Hold objects as close to the body as possible.
- Lift slowly, smoothly and without jerking.
- Avoid unnecessary twisting. Turn at the feet, not the hips or shoulders.



WORKPLACE INJURIES AND ACCIDENTS

Personal Injuries

Employees injured or involved in an accident should immediately notify their supervisor.

If injuries require medical treatment, use the nearest emergency room and confirm that the treatment facility accepts Worker's Compensation Insurance *before* being treated. Medical providers should be given the following contact information for worker's compensation:

The Texas A&M University System
Office of Risk Management
301 Tarrow Street, 5th Floor
College Station, TX 77840-7896
Phone: 866-249-8574, 979-458-6330
Fax: 979-458-6247

Employees should provide the treating hospital or emergency room with a copy of the [Texas A&M University System Coverage Form](#).



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The injured employee's supervisor will submit a [Preliminary Report of Injury](#) to the EHS Officer within two days when an employee reports an occupational disease or sustains a job-related injury that results in medical care obtained at a treatment facility or loss of a full day (8 hours) of work.

Occupational exposure to disease must be reported to the EHS Officer when the employee is first informed by a competent medical authority of the nature and possible work-related cause of the illness.

Note: Failure to report the injury within 30 days may result in denial of a Workers' Compensation Insurance claim. Questions about coverage or benefits under workers compensation should be directed to AgriLife HR.

Precautionary Reporting

Occasionally an employee may suffer a minor injury and is reluctant to fill out a preliminary report of injury form. However, even the slightest injury can lead to complications that require medical attention or result in lost time, e.g., back strain or exposure to chemicals. If an employee sustains an injury and does not see any immediate need for medical attention or does not lose any time because of the injury, the employee will submit the injury report as a precautionary measure by writing "PRECAUTIONARY" on the top of the form.

The injured employee will keep his/her supervisor informed of any changes in work status following an injury which affects his/her ability to perform their job.

Vehicle Accidents

Commercial driver license (CDL) holders involved in an accident in an agency commercial vehicle are required to take a post-accident drug and alcohol test. Refer to Administrative Procedure [60.07](#), *Post Accident Drug and Alcohol Testing for Commercial Driver's License Holders* for requirements.

All drivers of agency vehicles that are involved in a motor vehicle accident will call 911 to report the accident so that a local law enforcement officer will respond to the scene and prepare an accident report. This report is important to help protect the agency in any resulting injury and damage.

All accidents or damage to an agency vehicle will be reported to the EHS Officer on the [Motor Vehicle Accident Report Form](#) (MVAR) within two days of the accident.

Drivers should take digital photos of the vehicles involved in the accident to assist with the claims process. These photos should be submitted when the MVAR is submitted. Drivers should not admit fault in the accident. The System Risk Management Office will determine liability.



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Drivers should not supply a copy of the MVAR to the other driver. This is a System form only. Email the forms to safety@tfs.tamu.edu.

Accidents and damage involving rental cars should be reported to the Incident Command Post (ICP) Logistics Section Chief on the MVAR. Additionally, operators should fill out and submit the rental fleet accident/damage report form and provide it to the rental agency.

For accidents involving state or federal cooperators assigned to an incident, contact the finance section chief or safety officer for direction.