Prowess Utility Group Inc

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CODE OF SAFE PRACTICES



YOUR OSHA COMPLIANCE SOLUTION

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Abuse and Domestic Violence Reporting

Policy

Abuse has many forms and many victims, so those who work in the healthcare, law enforcement, or education fields must be properly prepared to watch for signs of abuse in all patients, clients, or students.

Safe Work Practices

All healthcare workers, educators, law enforcement officers, and child care workers are mandated reporters when it comes to abuse. If you suspect abuse you must either call local child protective services or social services. When reporting, you should have as much information as possible on hand, including:

- A description of all injuries and dates you noticed them.
- The identities of any suspected abuser(s).
- As many details of physical evidence as possible.
- The current condition and location of the victim.
- A statement from the victim, if possible.



Aggressive Clients

Policy

Health care and social service workers are susceptible to, and face significant risk of being attacked physically by an aggressive client. Facilities where this could most happen are, hospitals, residential treatment facilities, outpatient treatment facilities, community care facilities, and in field work while making home visits.

- Workplace violence prevention policy.
- Recognizing the risk factors that contribute to assaults.
- Being able to locate all applicable safety devices, i.e. alarms.
- Ways to recognize, prevent or diffuse volatile situations.
- Ways to deal with hostile behavior.
- Progressive behavior control methods and when and how to apply restraints properly and safety when necessary.
- Ways to protect oneself and coworkers, including use of the buddy system.
- Recognizing the early warning signs of escalation such as:
 - Blame Shifting
 - Confusion
 - Agitation
 - Anger
 - Aggression



Air Compressors

Policy

Compressed air is one of the most popular sources of energy in today's work environments. It powers a wide variety of tools and equipment as well as large machines and process lines. Benefits of compressed air include low maintenance costs, a low weight to power ratio and the ability to operate for long periods without overheating. The dangers of using compressed air are compared to the use of electricity. Just like electricity, compressed air can be deadly if not treated with respect and used properly.

- Before using compressed air equipment, always inspect it and make sure everything is in good working order.
- Hoses should be checked carefully for any sign of damage. Air hoses with cracks or other damage should be removed from service.
- Air fittings and couplings should also be inspected. They should fit tightly into the hose and be clamped securely with an approved machine clamp. If couplings require locking pins, make sure they are in place before use.
- NEVER use homemade air nozzles.
- Keep tools that are used with the compressed air in good working condition.
- If a tool is dropped, inspect it for dents & bends.
- Do not carry tools by the hose.
- Test the valve on the compressor regularly.
- NEVER remove the guarding around the belt and shaft of the compressor motor.



Air Driven Fluid Pump

Policy

Air driven fluid pumps can be a great way to transfer a variety of liquids from one place to another. While these pumps are relatively safe, they could potentially expose employees to harm if they are improperly operated or maintained. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring when operating or maintaining an air driven fluid pump.

Safe Work Practices

Before operating or maintaining an air driven fluid pump, employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Inspect the pump for missing or damaged parts. Report missing or damaged parts to your supervisor. Do NOT operate a pump that has missing or damaged parts.
- Ensure that there are no fluid or air leaks. Report fluid and air leaks to your supervisor. Do NOT operate a pump that has leaking air or fluid.

When operating an air driven fluid pump, employees should do the following:

- Only authorized employees should operate the pump.
- Operate the pump in accordance with the manufacturer's instructions.
- Do NOT exceed the maximum air drive pressure listed on the pump label.
- Only use with liquids that the pump has been approved for.
- Do NOT operate the pump in an enclosed vessel.
- Do NOT modify the pump. Report modified pumps to your supervisor. Do NOT operate modified pumps.
- Do NOT grab hold of a pressurized component.
- Ensure that hoses, lines, and screw connections are depressurized before dismantling or assembling.
- Immediately clean up any spilled liquids. Liquids should be cleaned and disposed of in accordance with all local, state, and federal laws.
- Do NOT smoke near the pump.
- Ensure that there is sufficient ventilation when working with evaporating fluids.

When performing maintenance on an air driven fluid pump, employees should do the following:

- Only authorized employees should perform maintenance on the pump.
- Ensure that the unit is properly depressurized before dismantling or assembling parts.
- When replacing parts, employees should only use manufacturer-approved parts.



Air Gun Safety

Policy

Air guns are commonly found in many work areas. Employees who use an air gun to clean their work area, surface, or machine could potentially be exposed to harm if the air gun is improperly used. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring while using an air gun.

Safe Work Practices

Before using an air gun, employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Inspect all of the components of the compressed air system or portable air compressor for missing or damaged parts. Report missing or damaged parts to your supervisor. Do NOT use a compressed air system or portable air compressor that has missing or damage parts.
- Inspect the air gun for damage or items that may have gotten lodged in the barrel. Report damaged air guns to your supervisor. Do NOT use a damaged air gun or an air gun that has something lodged in the barrel.
- Ensure that the connections for both the air gun and air compression system or portable air compressor are compatible. Do NOT use incompatible components.

When using an air gun, employees should do the following:

- Operate the air gun in accordance with the manufacturer's instructions.
- Do NOT use air guns in excess of OSHA requirements.
- Use the appropriate air gun for the task.
- Do NOT modify the air gun. Report modified air guns to your supervisor. Do NOT use modified air guns.
- It is recommended that employees de-pressurize the air compression system before attaching the air gun.
- Use a chip guard or chip shield.
- Blow debris in a direction that is away from you and your coworkers.
- Do NOT use the air gun to clean yourself.
- Do NOT point the air gun at yourself or coworkers.



Air Hose Safety

Policy

Compressed air can cause serious injuries so it is always important to make sure you are using the proper equipment and using it correctly.

- Do not yank the air hose if it gets caught around an object or a corner. Instead, walk over to the
 point where it is caught and untangle it.
 - Wear your PPE.
 - Safety goggles or a face shield to protect your eyes from the compressed air or flying debris
- Ear plugs or ear muffs to protect your hearing; air hoses are often with tools that have noise levels about 85 decibels, which can lead to hearing loss.
- When you are finished using the air hose be sure the air supply is turned off and the hose is bled before you detach it.
- Keep the air hose off in a safe place to make sure people (yourself included) do not trip over it.
- Prevent sharp objects from rubbing against the hose.
- Keep the hose away from heat and oil, both of which can cause it to deteriorate.
- Coil the hose without kinks and hang it in a safe place when not in use. (Proper storage of air hoses can make them last for up to 5 years longer.)



Airborne Contaminants

Policy

Airborne contaminants can affect the health of any person working with or around equipment that could release high levels of contaminants exceeding the minimum exposure limits. Proper training on the equipment used, along with safe work practices, should reduce the risk of illness and/or injury.

Safe Work Practices

Airborne contaminants can be avoided through well-educated employees who participate in safe work practices and that are fully aware of the health hazards exposure can create.

- Use protective equipment or other protective measures to keep the exposure of employees to air contaminants within the limits prescribed.
- Protective equipment used will be first inspected and approved for each particular use by an authorized technically qualified person.
- Tests should be conducted on all internal combustion equipment exhausts in enclosed spaces to avoid high concentration exposure to employees.
- Avoid any exposure to asbestos or formaldehyde.



Airborne Filters

Policy

Airborne filters are necessary protective equipment and should be supplied and used, to protect employees from chemically harmful, hot or irritating materials. Using the proper filters on equipment and protective gear is part of proper maintenance and care which contributes to the safety element of those items used. Safe work practices are established to maintain the health of the employees, the functionality of the equipment and the purpose for the protective gear.

- Before employees are permitted to work under hoods, covers or auxiliary equipment that are raised or suspended overhead should be:
 - Secured
 - Inspected frequently
 - Should sufficiently support the load.
- Floors, walkways, stairs or ramps built with handrails should be:
 - Adequate for the work performed.
 - Anti-skid surfaces will be provided when necessary.
 - Sumps or other floor openings should have covers.
- Filters with pressure activation should include a pressure gauge.
- Installation of any electrical gear involving filtration should always be grounded.
- Properly identified switchgear should be waterproof and installed away from the filtration area.
- Filters should be covered to prevent hazardous chemicals from endangering employees.
- With vacuum and Filtrate pumps and lines:
 - All drives should be enclosed and guarded.
 - Lines should be adequately identified.
 - When valves are installed in lines, they should be accessible from the floor.
 - o A ladder, a platform or extension handles can also be used.



Anticipating Accidents

Policy

Accidents occur for many reasons. Understanding why an accident happens is the first step in prevention.

- Having confidence is a good thing but being over confident can be dangerous.
- Failing to observe safety procedures can endanger all workers.
- As we try to be more efficient, we tend to take shortcuts that can lead to unsafe conditions and increased chances for injuries.
- An employee should not be intimidated about asking for better instructions and should never try to do a task without knowing exactly how to do things correctly.
- A well maintained work area sets a standard for all.
- Doing a task safely requires mental attention.
- Thinking through a process to complete a task can take away hazards.



Asphalt Loader and Shoulder Machine Safety

Policy

Asphalt loaders and shoulder machines make quick work of tedious tasks, but can be very dangerous if not operated properly. Employees must know the hazards involved, wear the appropriate personal protective equipment, and follow all safe work practices to protect themselves and others.

Safe Work Practices

The following safety guidelines must be followed at all times by employees who work with asphalt loaders and shoulder machines:

- Make sure all metal parts that carry or transport asphalt are clean, smooth, and free of holes.
- Before being loaded, asphalt loaders and shoulder machines must be cleaned of hardened asphalt and coated with a release agent to prevent asphalt from sticking to the surfaces.
- Make sure the work area is clear of ditches, debris, overhead lines, or other obstacles that could affect operation before use.
- Asphalt loaders and shoulder machines should never be operated by one person alone.
 - Additional employees should be present to continually watch for obstacles as the machines move along.
- Asphalt machines should never be left unattended while they are on.
- Keep all ignition sources, sparks, and open flames away from hot asphalt.
- All employees who work with or near asphalt trucks must know where the nearest fire extinguisher is located.
- Employees must stay clear of all moving parts and wheels while working.
- When finished, make sure the asphalt loader and shoulder machines are emptied of all asphalt, turned off, and parked in their proper storage areas.



Asphalt Safety

Policy

Asphalt can be very dangerous, even though it is widely used. Remember to properly handle asphalt so you can avoid injuries and hazards to your health.

Safe Work Practices

Always check the Safety Data Sheet (SDS) to know for sure the safest ways to handle the asphalt you are using that day, and keep these general tips in mind:

- Never lean over a kettle.
- Avoid breathing in the fumes.
- Don't eat, drink, or smoke around asphalt.
- Wear the proper PPE:
 - Face shield
 - Gloves
 - Boots or safety shoes
 - Long sleeves and long pants
- Be sure you have the proper type of fire extinguishers on hand.
- Do not carry buckets of asphalt up ladders.
- Try not to disturb the skim part of the asphalt in the kettle as it's heating up; disturbing the skim could cause more fuming.



Asphalt: Transfer Buckets Safely

Policy

Asphalt can get to over 450 degrees, and therefore can very easily burn exposed skin. There are many things to consider when transferring hot asphalt to make sure it does not spill and cause burns or other problems. Keep these rules and safety tips in mind when you are transferring asphalt.

- In addition to not filling the bucket more than 4 inches from the top, do not fill any other container more than 75% of its capacity.
- Personal Protective Equipment (PPE):
 - Wear safety goggles to protect your eyes from splashes or spills.
 - Thermally insulated gloves: The asphalt could soak through leather or cotton gloves and cause damage.
 - Safety Shoes.
- Do not allow water to splash into asphalt buckets or kettles.
 - The water can cause bubbling up or explosions.
- Wear long pants and long sleeve shirts.
 - Do not roll up your pants or shirts because asphalt could get caught in the cuffs and burn.
 - Keep the neck closed on your shirt.
- Do not eat or drink around asphalt.
- Do not engage in horseplay while around asphalt.
- Keep the asphalt away from sources of ignition.
 - Especially do not smoke while carrying asphalt.
- Have a proper fire extinguisher ready in case the asphalt catches on fire.
- Keep the lids of asphalt containers closed as much as possible.
- Use a twisting motion to unstick buckets to minimize the amount of splashing.



Backhoe Loader: Safe Operation

Policy

Backhoe loaders, or backhoes for short, cause many injuries at jobsites every year. The operator of the backhoe has a responsibility to use caution to keep him or herself safe, keep others safe, and avoid causing damage to the equipment or the site.

Safe Work Practices

The leading cause of accidents involving backhoes is working too close to an edge and operating on steep or uneven grades. Proper use of stabilizers, as well as the following safety guidelines, will help to reduce these risks greatly.

- Stabilizers should be spread to their full width and the bucket must be in solid contact with the ground. If the machine is not stabilized correctly, it will bounce and increase the level of risk.
- Beware of ground conditions under your stabilizers and add support as needed.
- When operating on a hill, swinging a full bucket of dirt changes the center of gravity. Make sure you always work slow and keep your bucket as low as possible.
- Make an effort to know where others are in your area at all times.
- Keeping the bucket as low as possible at any time will avoid throwing off the center of gravity and maintain visibility.
- Avoid driving across a hill with a loaded bucket, instead go straight up or down the hill.



Backs and Lifting

Policy

Back injuries are one of the most common types of injuries in the workplace. By following the guidelines presented in this lesson, employees can help minimize their chances of a back injury from occurring while lifting or lowering objects. Employees should remember to use team lifts or mechanical methods of lifting whenever possible over manual methods.

Safe Work Practices

To aid in the protection of the back, employees should do the following when performing lifting tasks:

- Avoid lifting and bending whenever possible.
- Place objects where they are easy to access.
- Avoid placing objects on the floor when possible.
- When possible, use a dolly or forklift to lift objects instead of manual methods.
- If a manual lift must be performed, keep objects between your shoulder and waist.
- When possible, push an object rather than pull. Pulling puts more strain on the back muscles than pushing.
- Don't lift heavy loads. If you're straining under the weight of an object, then it is too heavy for you to lift alone.
- Make sure that you have enough room to lift safely before picking up an object.
- Know the destination of your load before picking it up.
- Avoid walking on slippery and uneven surfaces while carry objects.
- Plan your move
 - Ensure that the path you are going to take is clear of wet surfaces, obstacles and obstructions, and that there are no slopes.
- Size up the load
 - Look at the location of the object. If the object is overhead or on the ground, think about how
 you can safely reach it or how to get into a comfortable position to reach it.
 - Test the weight of the object that you will pick up.
 - Test the object for shifting contents. Shifting contents can affect how the object will behave when lifted.
- Get help as needed
 - Perform a team lift if the size or weight of the object is too much for you handle. Lifting awkwardly-shaped or sized objects can be just as dangerous as lifting heavy objects when you do it alone.
- If you have the option, use a dolly or other piece of material handling equipment over manual lifting methods.



When a manual lift must be performed, employees should use the following technique to minimize or eliminate the strain on the back:

- Get as close to the object as possible.
- Use a wide, balanced stance with one foot slightly ahead of the other with your heels on the floor.
- Bend your knees when lifting or lowering objects. This will help you keep the natural curve of your spine.
- Use your palms, not just your fingers, to grasp the load. It is recommended that you place your palms on opposite corners of the object.
- Keep your head up while lifting.
- Lift with a smooth, steady motion. Keep the object between your shoulders and waist area.
- Pivot to turn in the direction that you want to go. Do NOT twist.
- Slowly lower the load. Slow lowering will help maintain the curve of your lower back.
- When you have to get an object from above shoulder height, employees should lower the front portion so that it is below the shoulder.



Bathroom Procedures (Sanitation and Personal Hygiene)

Policy

Protecting employees and the public from disease is very important for any industry or business, especially when a bathroom is shared with multiple people. If proper sanitation and personal hygiene practices are not followed, many people can end up being sick which can result in employees having to stay home and recover. By practicing good sanitation and hygiene, an employee can take pride in doing their part in keeping his or her fellow coworkers healthy.

Safe Work Practices

PROPER SANITATION

Proper bathroom sanitation includes:

- Inspecting and maintaining plumbing.
- Using appropriate disinfectants and chemicals.
- Emptying trash receptacles when they have become full or near full.
- Ensuring that restrooms are stocked with toilet paper, soap or hand sanitizer, and paper towels if your facility does not have air dryers.
- Dusting partitions and air vents at least once a month, if not weekly.
- Replacing urinal tablets at least once a week or as needed.
- Using proper glass cleaner for mirrors and chrome finishes.

GOOD PERSONAL HYGIENE PRACTICES FOR RESTROOMS

Good personal hygiene stops the cross contamination of bacteria from one surface to another and includes the following practices:

- Utilizing and flushing disposable toilet covers when they are offered.
- Sitting properly on a sit toilet or standing properly when using a urinal.
 - Note: American toilets are NOT designed for squatting. Squatting could result in feces or urine landing outside the bowl which could result in other employees or the public being exposed to diseases.
- Flushing used toilet paper.
- Washing your hands with soap and warm water.
 - Note: Use Soap under your fingernails as well as all over your hand. Fingernails can be a hiding place for bacteria.
- Using a paper towel or hand dryer on hands after they have been washed with warm water and soap.
- Throwing used paper towels into trash receptacles.



o Note: If you want to ensure that your hands are clean after using the restroom, use a paper towel to open doors with handles.

Battery Handling Safety

Policy

To prevent blindness, explosions, skin damage, lead poisoning, and other hazards, be sure to be safe when handling batteries.

- Do not store batteries in places with really high or really low temperatures
- Have an immediately accessible fire extinguisher nearby
- Store batteries in a well-ventilated area
- Do not dispose of the battery with regular trash; follow the manual, SDS or your company's procedures



Blood Pressure, Stroke and Heart Attack

Policy

High blood pressure causes more preventable deaths than any other disease. A heart attack is what happens when a clot becomes large enough to cut off most or all of the blood flow through an artery. The blocked blood flow prevents oxygen-rich blood from reaching the part of the heart muscle fed by the artery.

- High Blood Pressure
 - Detection of high blood pressure is often difficult due to a lack of symptoms manifested.
 Because of this characteristic, blood pressure should be checked once a year at minimum and more often as a person grows older.
- Stroke
 - Visual problems like a sudden change in vision or sudden double vision
 - Numbness of the face, weak arms or legs, weakness on one side of the body
 - Disorientation, problems with speech (e.g., slurred speech), and/or trouble understanding others
 - Trouble walking, dizziness, loss of balance or coordination
 - Painful headache that comes on suddenly and has no known cause
- Heart Attack
 - The most common symptom of heart attack is chest pain or discomfort
 - The discomfort can feel like uncomfortable pressure, squeezing, fullness, or pain.
 - Upper body discomfort in one or both arms, the back, neck, jaw, or stomach
 - Shortness of breath may often occur with or before chest discomfort
 - Nausea (feeling sick to your stomach), vomiting, light-headedness or fainting, or breaking out in a cold sweat



Bloodborne Pathogen Safety: Medical

Policy

Bloodborne pathogens transmit devastating diseases that last a lifetime, but this can be prevented if the appropriate safety steps are taken. Always wear the required personal protective equipment and follow all safety practices given to you by your employer and outlined by OSHA to keep yourself safe.

Safe Work Practices

Knowing the most common routes of exposure, we can take steps to avoid dangerous situations. Employees must practice the following safety rules in order to protect their safety:

- Personal protective equipment such as a gown, gloves, face shields, eye protection, respirators, mouthpieces and resuscitation devices (during resuscitation) must be worn or used to provide a barrier between potential contaminants and susceptible parts of the body.
- Always use needles with sheaths or caps if you have access to them, and cap needles after use.
- Use verbal cues when handing sharps to another employee.
- Replace the sheath or cap immediately following use.
- Properly dispose of sharps after use.
- Do not attempt to complete a task by yourself that you suspect you may need assistance for.
- Work surfaces must be decontaminated regularly.



Bloodborne Pathogens

Policy

Although exposure to bloodborne pathogens is minimal in some work environments, it is necessary to take precautions to avoid exposure. Following the proper procedures can keep you safe.

- Use "Universal Precautions" a concept that says that all human blood and certain human fluids are treated as if known to be infectious for HIV, Hepatitis B and other bloodborne pathogens.
- Whenever you do a job or task that may expose you to bloodborne pathogens, you must wear protective equipment:
 - A full-face shield to protect your mouth, eyes and nose.
 - Protective gloves for your hands. If you have cuts or any broken skin, use appropriate cover or protection. (If you have a barrier cream, it is important to protect your hands under the protective gloves.)
- Avoid all actions and tools that may cause a personal injury.
- Avoid sharp or jagged objects.
- Wash your hands and face after completing the assigned task with soap. (Hands should be washed after gloves are removed.)
- If any exposure is suspected, you are to wash your hands and any other skin area with soap and water or flush mucous membranes with water immediately.
- Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses are
 prohibited in work areas where there is a reasonable likelihood of occupational exposure.



Bobcat Safety

Policy

As most heavy machines in the construction industry, Bobcats require practice and skill to operate safely. A bobcat, also called a skid-steer loader, has a variety of uses from construction to landscaping to digging. Knowing how to safely and effectively operate a Bobcat loader is a useful skill on the job site.

- Follow the manufacturer's operating and servicing instructions.
- Never operate the machine from the outside of the cab.
- Elevate loads no higher than necessary.
- Avoid working or moving below elevated loads.
- If you must work beneath an elevated load, securely block it and do a hazard assessment to ensure the blocking will remain severe.
- Always wear a seat belt.
- Check your surrounding while operating a Bobcat to ensure your safety and the safety of others around you.
- Make sure the bucket is lifted up a bit when moving the Bobcat to avoid skidding on the ground, but not too high. The bucket should not disrupt your visibility.
- Do not make sharp turns or go up slopes with the bucket raised.
- Avoid steep or uneven slopes and navigate slopes with the heaviest part of the loader facing uphill.
 Go directly up or down slopes, not across.
- Make sure surrounding workers are aware of the dangers of working near loud and powerful
 equipment that has limited operator visibility.
- Check the work area for hidden hazards such as holes, drop-offs, and snags before operating a Bobcat.
- Before starting the Bobcat, always engage the parking brake and set all controls to neutral or park position.
- Idle the engine for 30 seconds before shutting it down to allow the Bobcat engine to cool.
- Before turning off the bobcat, set all controls to the neutral or park position, engage the barking brake and fully lower the bucket.



Boring Operations

Policy

Boring and drilling can be dangerous if certain precautions are not taken to ensure employee safety. Following company safety procedures and these work safe practices will help to create and maintain a safe work environment, and prevent injuries or death.

- Each state has its own 8-1-1 call center. An 8-1-1 representative will ensure that the utility company will mark buried lines, so you can dig around them safely.
- Only qualified and trained personnel should operate the equipment.
- Unnecessary personnel should be prohibited from the work area.
- A safe work area should be maintained around the entry and exit points.
- Equipment should be set up and maintained
- Use 3 points of contact while entering the machine.
- The operator(s) should be familiar with the work area.
- Be aware of the proximity of any and all overhead power lines.
- All operations should be performed in compliance with OSHA, EPA, DOT, and other regulatory agencies guidelines.
- The operator should maintain constant communications with all essential personnel.
- A spotter should be appointed to help out in case there are underground utilities, overhead power lines, and/or tight working conditions.
- Only the operator should be in charge of the controls at all times during the operation of the equipment.



Box Cutter Safety

Policy

Box cutters are a simple, common tool used by employees in many industries, but they can also be dangerous. Employees who use box cutters at work need to stay focused and follow the safe work practices, no matter how many times they have used a box cutter before.

Safe Work Practices

Roughly 30 percent of all workplace injuries involve cuts or lacerations, and of those, about 70 percent are injuries to the hands or fingers. To avoid this, employees need to follow the appropriate safe work practices:

- Always wear cut-resistant gloves when using utility knives.
- Always use even pressure to cut in a direction away from your body.
- Use caution when opening since some utility knives can store extra blades in the handle.
- Never try to catch a cutting tool if you drop it.
- Replace dull blades as needed because sharp blades will reduce the amount of tugging and pulling which could cause your hand to slip.
 - Always dispose of used blades in a puncture resistant container.
- Avoid distractions and keep your eyes on your work while using a box cutter.
 - If you are interrupted while using a box cutter, retract the blade (if possible) and set it down on a safe place.
- Always retract the blade or place your box cutter in the proper storage place when not in use.
- Pass box cutters handle-first with the blade retracted.
 - Never throw a box cutter to a coworker.
- Only use utility knives or box cutters for their intended purpose.
- Make sure the object you are cutting is secured in place to prevent movement while cutting.
- When cutting, only extend the blade to the thickness needed to cut the material. This not only prevents damage to items inside the box, but also improves cutting leverage.
- Wear cut resistant gloves. Cut resistant gloves will not prevent all cuts from occurring, but will
 minimize the potential for injury when used properly.



Bulldozer Safe Operation

Policy

Becoming familiar with the bulldozer you will be operating and applying all safety training you have received from your employer will help keep you and others safe.

Safe Work Practices

General safety guidelines for operating bulldozers are as follows:

- A safety inspection should be conducted on each machine before use. This includes backup signals, seat belt condition, lever function, etc.
- Do not operate a bulldozer unless you have been trained and authorized by your employer to do so.
- Before starting the bulldozer fasten your seatbelt, and check that the path is clear of workers, objects, and other obstructions.
- When the bulldozer is in need of repair, workers must follow proper lockout/tagout procedures.
- A system of traffic controls must be used when operating the bulldozer on public roads or in areas close to, or obstructing vehicle traffic.
- Be watchful for overhead power lines and any ditches or trenches when operating the bulldozer.
- As with any industrial truck, shut off the engine whenever refueling.
- Never mount or dismount where hand and foot holds are not provided.
- Never climb or walk on the tracks.
- Blades and attachments must be kept close to the ground while moving.
- When parking, the bulldozer should either be on level ground or blocked to prevent rolling. Set the
 parking brake, lower all attachments to the ground, and turn the machine off before exiting for any
 reason!

Operating on a Slope

- Walk the slope before grading it to check for irregularities, erosion, or rocks that could negatively affect the bulldozer's traction.
- Only operate the machine up and down the sloped terrain rather than across.



Burns: Kinds and Treatments

Policy

Know where your first aid kit is located and make sure that items are replenished. Burns can be painful and cause irreparable damage in seconds. Always call for medical help in severe cases and be prepared to treat the victim for shock.

- First aid for heat burns
 - For first-degree and second-degree burns with no open blisters, flush with lots of cool running water. Apply moist dressings and bandage loosely.
 - For second-degree burns with open blisters, call for medical help then apply dry dressings and bandage loosely.
 - For third-degree burns call for medical help immediately. Remove clothing from the burn area unless it is stuck to the burned area. Never peel stuck clothing from a burn. You can submerge the burned area under cold running water, pat dry and apply loose, sterile bandage.
- First aid for chemical burns
 - Call for medical help.
 - Use lots of running water to flush chemicals from the skin for 15 to 30 minutes.
 - Remove any clothing and jewelry on which chemicals have spilled.
 - Cover burns with dry, loose dressings.
 - Care for possible shock.
- First aid for electrical burns
 - If the emergency is outside and you suspect downed power lines, call the power company first.
 - If the emergency is inside, turn off the electricity at the fuse box or circuit breaker.
 - NEVER touch a person injured by a downed power line. Get emergency help instead.
 - Cover all burns with dry, loose dressing and then bandage.
 - Care for shock.



California: Cell Phone Use While Driving

Policy

Today, the incidence of drivers using a cell phone while operating their car has increased. Cell phones can be a useful tool for calling road service or reporting accidents and other emergencies, but they can also put you in danger.

Safe Work Practices

If you absolutely must have access to your cell phone while on the road, the law requires that you do so "hands-free" which means that the phone is not in your hands at all, even if you are using the speaker-phone feature.

Some options for becoming hands-free are:

- Speaker phone
- Wired headset
- Bluetooth device
- Hands-free car kit

The safest way to handle outgoing calls is to:

- Wait until you have reached your destination to dial.
- Look for an exit that will lead you away from the hazards of traffic before making a call.
- Avoid stopping on the shoulder of a road where it is not safe.

The safest way to handle incoming calls is to:

- Let your passenger answer.
- Let the call go to voicemail and retrieve the message and return the call when you have reached your destination.
- Pull over and stop your vehicle in a safe location before answering calls.



Calling 9-1-1

Policy

Knowing the difference between calling 9-1-1 from a landline phone and calling 9-1-1 from a cell phone can make a difference in how long help will arrive. If you choose to call 9-1-1, you need to know what to expect and how to react.

Safe Work Practices

Calling 9-1-1 can be very stressful and it's easy to feel overwhelmed. 9-1-1 call-takers are trained to guide callers through the experience, but knowing what to expect can help make the 9-1-1 call go smoothly and get emergency help where and when it's needed.

- Stay calm. Take a deep breath and do not get excited. The dispatcher or call-taker knows that you have an emergency and he/she will try to move things along quickly, but under control.
- Know the location of the emergency and the number you are calling from. This may be asked and
 answered a couple of times, but don't get frustrated. Even though many 9-1-1 centers have
 enhanced capabilities meaning they are able to see your location on the computer screen they
 are still required to confirm the information. If for some reason you are disconnected, at least
 emergency crews will know where to go and how to call you back.
- Wait for the call-taker to ask questions and then answer clearly and calmly. If you are in danger of assault, the dispatcher or call-taker will still need you to answer quietly, mostly "yes" and "no" questions.
- If you reach a recording, listen to what it says. If the recording says your call cannot be completed, hang up and try again. If the recording says all call-takers are busy, wait! When the next call-taker or dispatcher is available to take the call, it will transfer you.
- Let the call-taker guide the conversation. He or she is typing the information into a computer and may seem to be taking forever. There is a good chance that emergency services are already being sent while you are still on the line.
- Follow all directions. In some cases, the call-taker will give you directions. Listen carefully, follow each step exactly and ask for clarification if you don't understand.
- Keep your eyes open. You may be asked to describe victims, suspects, vehicles or other parts of the scene.
- Do not hang up the call until directed to do so by the call-taker.



Cannabis (Marijuana) in the Workplace

Policy

With certain states legalizing the medical or recreational use of cannabis, employees should remember that it has effects similar to alcohol or other drugs. Employees who arrive at work while under the effects of cannabis could potentially expose themselves or coworkers to injuries. Employees should become familiar with either their company's zero-tolerance or alcohol and drug policies.

Safe Work Practices

When a person has used cannabis by either smoking, vaping, or ingesting (edibles) for a short period of time, they could potentially experience some of the following short-term effects:

- Increased heart rate
- Low blood pressure or orthostatic (positional) hypotension (a decrease of blood pressure within 3 minutes of standing)
- Relaxed muscles
- Slowed digestion
- Dizziness
- Distorted perception (sights, sounds, time, touch)
- Difficulty in thinking, memory, and problem-solving skills
- Loss of coordination and motor skills
- Increased appetite
- Dry mouth
- Dry eyes
- Coughing

Note: Scientists have noted that there is an increased chance of people have feelings of agitation, anxiety, confusion, panic, or paranoia in people who have psychiatric disorders or in people who are using for the first time.

Note: THC, a component of cannabis, that contributes to many of the effects of the plant can show up in urine a month after the effects of cannabis have worn off.

Note: Due to cannabis being illegal under federal law and classified as a Schedule 1 drug, there is limited research on the long-term effects of cannabis. The long-term effects that are listed below are the currently known effects that have been studied by scientists.

If a person has been using cannabis for an extended period of time (months or years), they could potentially experience some of the following long-term effects:

Worsening of psychiatric disorders such as depression



- Reduction in short- and long-term memory
- Worsening of respiratory conditions
- The development of chronic cough or certain respiratory conditions (if smoking or vaping)

While arriving at work while under the effects of cannabis could result in consequences such as suspension or termination, employees should become familiar with their employer's zero-tolerance policy.

If an employer does not have a zero-tolerance policy, employees should become familiar with any drug and alcohol policies that the company has.



Cannabis Worker Safety

Policy

Working with or around cannabis could potentially expose employees to both physical and medical hazards. Both types of hazards can either be managed or eliminated when proper work procedures are followed. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring while working with or around cannabis.

Safe Work Practices

Before working with or around cannabis, employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Ensure that the floor is free of any slipping or tripping hazards. Remove obstructions as needed.
- Inspect all gas cylinders for leaks or damage. Report damaged or leaking gas cylinders to your supervisor. Do NOT use damaged or leaking gas cylinders.
- Inspect filters in all HVAC and other pieces of equipment. Replace filters as needed.
- Inspect areas where mold could grow. Report mold to your supervisor.
- Ensure that employees are notified about pesticide spraying. Employees should NOT enter areas where pesticides have been sprayed until the area has been deemed safe.
- Ensure that all security procedures are followed.

When working with or around cannabis, employees should do the following:

- Use all pesticides and chemicals in accordance with the manufacturer's instructions.
- Do NOT mix different pesticides or chemicals together.
- Read Safety Data Sheets (SDS) whenever you have a guestion about a pesticide or chemical.
- If a pesticide or chemical gets into the eyes, employees should use the nearest eyewash station for a minimum of 15 minutes. Report the use of an eyewash station to your supervisor. Employees should seek medical attention if eye pain or irritation persists.
- Store all gas cylinders, pesticides, and chemicals in accordance with all local, state, and federal laws.
- Clean up wet floors as soon as possible.
- Use proper ergonomics when lifting or working in areas that require squatting or bending.
- Practice good housekeeping.
- Use local ventilation whenever possible.
- Use Carbon Dioxide and Carbon Monoxide monitors.
- Do NOT use or store dry ice in confined areas, walk-in refrigerators, environmental chambers, or rooms without ventilation.
- Use tools powered by electricity or compressed air whenever possible.



- Do NOT use generators or gasoline powered engines indoors.
- Report all injuries to your supervisor.
 - This includes symptoms of dizziness or persistent headaches.
- Wash your hands before eating, drinking, smoking, or applying cosmetics (including lip balm).
 - It is recommended that employees also wash their face in addition to their hands.
- Ensure that all lockout/tagout procedures are followed when repairing equipment.



Carbon Dioxide Fire Extinguisher

Policy

The proper use, storage and handling of a carbon dioxide fire extinguisher is a vital element in a fire related emergency. Proper knowledge in the safe operation, and following these safe work practices will help to ensure employees safety.

Safe Work Practices

USING FIRE EXTINGUISHERS

Certain safety related criteria should be met before using a fire extinguisher. This criteria includes, but is not limited to:

- Fire alarm is pulled and the building is evacuated.
- The fire department (911) has been called.
- The fire is small, contained and not spreading beyond its starting point.
- The exit is clear, no imminent danger present, you can fight a fire with your back to the exit.
- It is possible to stay low and avoid smoke.
- The proper extinguisher for the type of fire is immediately available.
- Employee has read instructions and knows how to use the extinguisher.
- When possible use the buddy system.
- Employees should not fight a fire if their personal safety is in doubt.
- Stand several feet from the fire and remember the following:
 - Sweep back and forth at the base of the fire until the fire is completely out.
 - The metal parts of these particular extinguishers can get dangerously cold.
 - Do not walk into an "extinguished area", the fire could reignite without warning.

PROPER CARE AND MAINTENANCE

It is recommended to inspect the extinguisher at least once a month, while inspecting it should be ensured that:

- The extinguisher is centrally located and not blocked by any objects.
- The pressure is at the recommended level.
- The nozzle and other parts are not obstructed.
- The pin and tamper seal (if applicable) are intact.
- Extinguisher should be free of rust, dents, leaks and signs of wear and tear.
- Fire extinguishers should be pressure tested regularly, when in doubt consult the owner's manual.
- If the extinguisher needs to be recharged or has been damaged, it should be replaced immediately.



Carbon Dioxide Safety

Policy

Carbon dioxide can cause serious health problems even though you may not see it or smell it. Always wear the required personal protective equipment and follow all safe work practices as instructed by your employer. Should an accident occur, administer basic first aid and contact a physician.

- Test the air quality in confined spaces before entering.
- Take measures to increase ventilation.
- Always wear personal protective equipment.
 - Safety goggles protect from frost bite when handling liquid CO2.
 - Insulated protective clothing is required when handling liquid or solid CO2 (dry ice).
 - Either a NIOSH approved respirator or a supplied air respirator is recommended.



Carbon Monoxide Safety

Policy

Sometimes it's hard to remember carbon monoxide safety because the activities that produce it are so common. However, always being alert and remembering that a danger exists should help you protect yourself and others from carbon monoxide.

Safe Work Practices

PREVENTING OVEREXPOSURE

OSHA states that the permissible level of carbon monoxide in any enclosed space (such as a room or vehicle) can only be 50 parts per million, and a person is only allowed to be exposed to that level for 8 hours. If the carbon monoxide level reaches 100 parts per million, employees must leave the space. Therefore, in order to keep your workplace from reaching these levels, keep in mind the following tips:

- Avoid running any fuel engines indoors, even if the door is open.
- Consider switching from gasoline powered equipment to battery or electric equipment.
 - If you need to continue using the gas powered equipment, be sure to tune it regularly to be sure that carbon monoxide emissions are as low as possible.
- Pay attention to ventilation problems, especially in enclosed areas.
- Pay attention to your carbon monoxide monitors.
 - If they tell you it is not safe to be in the area, get out of there.

WHAT TO DO IN CASE OF OVEREXPOSURE

Act as fast as you can:

- Get the victim outside.
 - DO NOT go into a rescue situation without proper respiratory gear; it will not be good for you nor the victim if you suffer from overexposure as well.
- Call an ambulance.
- Do not re-enter the area without the approval of a fire department representative.



Cell Phone Emergency Use

Policy

Besides being convenient to keep in touch with your family and friends, cell phones are invaluable to have during emergencies. In fact, it is estimated that about 70 percent of 911 calls are made from cell phones. Remember these tips so things can go as smoothly as possible when you are using a cell phone during an emergency.

Safe Work Practices

One of the most important things you can do to get the most out of your cell phone during emergencies is to be prepared before anything happens. Remember:

- Keep your cell phone charged.
 - Have a car charger handy in case electricity fails.
 - Consider having a backup battery on hand as well.
- Store useful phone numbers.
 - Save the contact numbers for supervisors, police and fire departments, and even power companies.
- Know who to contact in case of an emergency.
 - Create a group for your emergency contacts: many phones have a feature that enables you to send one message to all the people in one group.
 - If you can't make a list, consider having a "phone tree" if there are many people you need to get into contact with - assign one person to contact two people, who are each assigned to contact two people, and so on.
- Consider having a backup phone in your emergency supplies.
 - Be sure you are familiar with how to work all your phones; an emergency is not the time to learn how to do so.



Cell Phones: Distraction Hazard

Policy

Cell phones have made both managing personal and business matters easier; however, there is a time and place for cell phone use. Cell phones should only be used when they are permitted and stored out of sight when they are not. Using a cell phone in work areas can be dangerous and employees can be injured if their cell phone distracts them from the task that they are doing. Employees should read and understand their company's cell phone policy to ensure their safety while on the job.

Safe Work Practices

Cell phone use will depend on the company that an employee is working for and what the company's phone policy states. Below are listed general behaviors that employees should follow.

- Inform family and friends about your company's cell phone policy. If your company does not permit cell phone use during working hours, provide your friends and family with a number that they can call in case of emergencies.
- Talk to your supervisor about times in which you might need to keep your cell phone with you.
- Save cell phone use for breaks and lunch.
- Respond to text message before work and after work.
- Keep cell phones off of working surfaces. Depending on the company, employees may be required to store cell phones in their desks, purses, or provided locker.
- Leave the work area to take a phone call (when permitted). If you are operating a machine, the machine should be shut off and you should not leave until it has come to a complete stop.
- Keep phone conversations short. Do NOT take too long on a cell phone call.
- Mute or set your phone to vibrate.
- Keep personal cell phones and business phones separate (if applicable).
- Answer the phone or respond to texts during working hours when it is not permitted.
- Talk or text while operating a forklift or other type of vehicle.
- Talk or text while operating a machine.
- Talk or text while attending a meeting.
- Walk while texting.
 - If you need to respond because it is business related, stop walking and respond.
- Send personal messages on a business cell phone.
- Use offensive language while talking on the phone.
- Take too long on the phone.
- Take photos with your cell phone cameras.



- Check or update social media.Play games on your cell phone.



Cement Mixer Cleaning and Maintenance

Policy

Cleaning a cement mixer after each use is the only way to prevent heavy buildup of cement, but it doesn't have to be dangerous if you use caution and follow all the safe work practices that you have been instructed to. Personal protective equipment should be your first line of defense against these hazards

Safe Work Practices

In order to avoid the above stated hazards, as well as hazards not mentioned, safe work practices include:

- Personal protective equipment (PPE) must be worn at all times. This includes safety glasses, gloves, and hearing protection (if applicable) in addition to standard PPE.
- Keep hands and body parts clear of all moving parts while the mixer is spinning.
- Keep all applicable guards in place.
- Handle acid and other chemicals with great care.
- Never add water to hydrochloric acid when diluting, instead add small amounts of hydrochloric acid to water.
- When using pneumatic tools, never aim a tool at yourself or anyone else.
- Be careful not to let air hoses get trapped underneath other equipment, as they will whip around violently until they are turned off if they become severed.
- Do not exceed the tool manufacturer's recommended air pressure for any pneumatic tool.
- Clean after each use to avoid buildup of cement.



Chain Hoist Safety

Policy

Chain hoists make a lot of jobs possible that may not otherwise be possible, but unsafe use by employees can cause the job to become very dangerous. The only employees who should attempt to operate chain hoists are those who have been properly authorized and agree to the safety rules.

- Employees should know the weight of the intended load and be familiar with the maximum load capacity of the chain hoist being used.
 - The load must never be greater than the maximum capacity of the hoist.
 - A good sign that the load is too heavy (when using a hand-operated hoist) is if you feel like you need a cheater bar or a second person to help pull.
- Make sure that the hoist is attached to a structure that is strong enough to support the load in addition to any possible shock load.
- Chain hoists may only be operated in areas that permit you to stand clear of the load at all times.
- Never operate a chain hoist in a way that forces the chain to bend or slide around corners or other sharp edges that may damage the chain.
 - Load chains and cables are not to be used as substitutes for a sling.
- Never pull so forcefully on a hand-operated hoist that the load jerks, bounces, or swings.
 - These sudden motions create "shock load" which could cause the load to exceed the maximum capacity of the hoist, chain, or other components.
- All loads must be centered on the hoist before lifting to avoid swinging.
- Suspended loads must never be left unattended.
- Do not work, walk, or allow others to pass under a suspended load at any time.



Chainsaw Safety

Policy

To keep the benefits of using a chainsaw and to lessen the danger, follow the above tips when you need to use a chainsaw.

- Preparing to use the chainsaw
 - Follow the manufacturer's instructions- each chainsaw could be a little different.
 - Daily check controls, chain tension, and all bolts and handles to ensure that they are functioning properly and that they are adjusted according to the manufacturer's instructions.
 - Check that the chain is sharp and the lubrication reservoir is full.
 - Clear away dirt, debris, small tree limbs and rocks from the chainsaw's path, and look for nails, spikes or other metal in the tree before cutting.
- Using the chainsaw
 - Be aware of your surroundings.
 - Cut at full throttle.
 - Let the saw do the work- do not push the saw. If you do find you have to push the saw, stop and sharpen the chain.
 - Hold the chainsaw firmly with both hands.
 - WORK WITH A PARTNER: If something goes wrong, you need somebody who can go get help.
 - Do not overreach to make a cut.
 - If you have to use a ladder, be sure to keep your hands free while climbing the ladder. Tether
 the chainsaw to you so you can pull it up when you reach your destination.
 - Follow your company's procedures.
- Kickback
 - Never use the top half of the saw tip (especially if you are a beginner).
 - Never bend over the saw; if you stand up straight and to the left of the bar, any kickback should go over your right shoulder.
 - Using anti-kick nose guards, quick-stop brakes, and wraparound hand guards on any saw you use.
 - Using a low kickback chain.
 - Keeping the chain properly sharpened.



Chemical Handling Safety

Policy

With proper handling, even highly toxic chemicals can be used safely. Remember to know what hazards the chemicals you are working with present and how to avoid them, and you will be able to prevent accidents and injuries from working with chemicals.

- All chemicals must be appropriately labeled.
- Use Personal Protective Equipment when handling chemicals.
 - If you are unsure what PPE to use, ALWAYS ask your supervisor and/or consult your SDS.
 - o Chemicals can enter your body through inhalation, absorption, ingestion, or injection.
- Use the buddy system or a way to constantly communicate with others if you are dealing with toxic substances.
- If your clothing is contaminated by the chemical, wash the clothing.
 - Be careful to not let your skin touch the contaminated clothing as you remove it.
 - Do not expose your family to the chemical by taking the contaminated clothing home to wash.
- If your skin is splashed by the chemical, wash immediately.
 - Follow the SDS for decontamination procedures.
- If your eyes are splashed with the chemical, go to the eyewash station and flush your eyes for 15 minutes.
 - Seek medical attention when you are finished flushing.



Chemical Storage Safety

Policy

There are many dangerous chemicals used in workplaces around the country. The danger can be reduced by using proper storage procedures and by following these safe work practices.

- All containers should be properly labeled with proper identity and hazard warnings.
- Chemicals should never be stored alphabetically unless they are compatible.
- Chemicals should be stored and dated upon receipt.
- Chemicals should not be stored:
 - Higher than "eye level".
 - o On the top shelf of a storage unit.
 - On overcrowded shelves.
 - o On shelves without an anti-roll lip.
 - On the floor.
- All chemicals should be stored away from direct sunlight.
- Be wary of conditions in chemical storage areas, such as:
 - Spilled chemicals
 - Trash accumulation
 - Improper storage
 - Temperature extremes



Chocking Wheels Safely

Policy

Chocking wheels is a simple, quick, and effective way to avoid accidental movement whenever rolling could result in serious injury or damage. Employees who park on slopes, perform maintenance or load vehicles at loading docks have a responsibility to use wheel chocks.

- Place the chock on the ground, and firmly slide one side of the wedge against the tire.
- Some wheel chocks DO have a weight limit, and it is important to know how much weight your specific wheel chocks can accommodate before using.
- If using wheel chocks to prevent rolling when parked on a slope, it is important to chock the side of
 the wheels that are facing the slope. If the street seems flat, employees must chock both sides of
 the wheel.
- Always use chocks in tandem pairs. For example, if you place a chock in front of the right rear tire, you must also place a chock in front of the left rear tire.
- Keep in mind that the surface the vehicle is on while chocked will make a difference. Wet or sandy locations will provide much less traction than dry asphalt or cement.
- The vehicle must be in park and the emergency brake must be engaged prior to installing wheel chocks.



Chop Saw Safety

Policy

A chop saw can be extremely dangerous if precautions are not taken to ensure employee safety. Following company guidelines and these work practices should help to ensure that a safe environment is maintained.

- Material should not be fed into the saw at a rate faster than it can handle.
- Employees should not attempt to cut material that is too short.
- Employees should never reach behind, over or under the blade, unless it has stopped turning and the power has been disconnected.
- The power should be disconnected before performing maintenance or adjusting/changing the saw blade.
- Employees should never make free hand cuts with a chop saw.
- Employees should make sure to hold the saw handle firmly while using it.
- The material should be firmly braced or clamped before cutting.
- Always exercise extreme caution, even when a saw blade is guarded it can still be dangerous and cause serious injury.
- Employees should allow the blade to reach full speed before cutting.



Circular Saw Safety

Policy

Circular saws (also known as skill saws) are very handy tools. However, when you plug a saw into a power cord, you have created a power supply for a tool that could easily kill or maim you for life. Therefore, it is important to use common sense and follow the proper procedures when you use a circular saw.

- Wear the proper equipment for the job you are doing.
 - Consider safety goggles, ear protection and gloves.
- Make your cuts straight and keep the power cord out of the line of the saw.
- Keep hands away from the cutting area behind the saw blade.
- Never remove, strap back, or otherwise modify the guard on the saw.
- Stand to the side of the saw to protect yourself from kickback.
- Keep your finger off the trigger/switch until you are ready to make a cut.
- Do not wear jewelry or loose clothing.
- Do not cut a board in the middle that is just lying on two sawhorses.
 - The board will sag or collapse about two-thirds of the way through the cut and cause kickback.
- Do not push the saw too fast.
- Never depend on a blade guard to protect you.
 - Use common sense- do not put anything you do not want to be cut into the path of the blade.
- When you are done cutting:
 - Take your finger off the trigger and do not move the saw.
 - Let the motor and blade come to a complete stop.
 - Never lift or move a saw from a cut while it is still running.
 - REMEMBER: The blade coasts to a stop after the switch is released- be aware of the necessary time it takes for the blade to come to a complete stop and don't let it brush up against you.



Close Calls

Policy

Accidents may be preceded by close calls that warn us of a safety problem. When safe outcomes do occur, there is nothing to capture anyone's attention: safety is invisible. Close calls can provide information that poses the greatest safety risk.

- Identification: Understand what a close call is so when it happens you can report it.
- Disclosure: Report the close call as soon as possible.
 - Who the accident would have potentially impacted
 - Where the close call happened
 - The type of safety concern (i.e. unsafe act, unsafe condition, unsafe equipment, etc.)
- Prioritization: Decide if the event needs immediate attention and analysis.
- Distribution: Give the information in the report to whoever is in charge of analyzing it.
- Identification of Causes: Find out why the event happened.
- Solution Identification: Find out what to do to make sure the event does not happen again
- Dissemination: Give the information to everyone who is affected by it: the person who reported the
 event, the people who work in the area or with the machine, and the person who will be in charge of
 making the solution a reality.
- Follow up: Make sure the changes actually happen and the workplace is made safer.



Collecting and Disposing of Batteries

Policy

Batteries are a normal sight in the working environment. Employees can be exposed to potential hazards when it comes to collecting or deposing of batteries. By following the safe work practices presented in this lesson, employees can help minimize the chances of an accident occurring when collecting or disposing of batteries.

Safe Work Practices

Note: Employees should be aware the "dead" batteries may still contain a charge in the battery. Employees should take the proper precautions to ensure that collected or disposed batteries do not pose a fire risk.

Depending on the state or local area, employees may be required to recycle batteries. When collecting batteries for recycling, employees should do the following:

- Ensure that you have the proper vessel for collection. It is recommended that non-metal containers be used for the collection of batteries.
- If a battery contains lithium or is rated 9-volts or more, employees should put clear packaging, masking tape, or electrical tape on the terminals. These types of batteries should be placed in a separate container from other batteries.
 - If employees do not tape the terminals for these types of batteries, the batteries could cause a fire during transport to the recycling or other designated facility.
- If a battery has been damaged, employees should place the battery in a non-flammable material such as sand or kitty litter and then check either the retailer's or manufacturer's website to see if there has been a recall. If a recall has been issued, employees should follow the recall instructions.

When disposing of batteries, employees should do the following:

- Ensure that all batteries are disposed of in accordance with the manufacturer's instructions.
- If batteries are to be sent or transported to a recycling facility, ensure that batteries have been either been separated or taped in accordance with the facilities instructions.
- Do NOT dispose of batteries in fire. Batteries that are thrown into a fire could explode.
- Do NOT throw damaged batteries in the trash, as they could cause a fire.
- If batteries are to be thrown in the trash (alkaline batteries), it is recommended that the batteries either have both terminal ends taped or place individual batteries in a strong plastic zip-top bag prior to being placed in the trash.
- Damaged batteries that have not been recalled should be placed in a clear plastic bag (one battery per bag) and taken to the nearest household waste recycling center or battery recycling center that accepts damaged batteries.



• Do NOT throw car batteries or batteries containing lead or acid in the trash. Car batteries and batteries containing lead or acid should be disposed of in accordance with all federal, state, and local laws.

Collection and Disposal of Drilling Lubricant

Policy

Due to the varied composition of drilling lubricant (mud) the hazards will vary from jobsite to jobsite. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring while collection and disposing of drilling lubricant.

Safe Work Practices

Before collecting or disposing of drilling mud employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
 - If you are required to wear a respirator, ensure that it fits properly. Report ill-fitting respirators to your supervisor. Replaces respirator filters as needed.
- Know the content of the mud so any additional necessary safety precautions can be taken.
- Inspect storage bins for damage. Mud leaking from storage bin may cause traction problems for personnel and equipment.

When collecting and disposing of drilling lubricant employees should do the following:

- Make sure no mud comes into contact with an unprotected part of the body.
- In the event of mud getting on the skin, employees should use the nearest emergency shower station.
 - If employees are unsure about the harmful effects on the skin, they should read the safety data sheets (SDS) to ensure they are following the manufacturer-specified procedures to minimize the harmful effects of the mud.
- Do NOT lift more than you can handle. If something is too heavy employees should use a mechanical means of lifting or ask another employee to help with a team lift.
- Practice good housekeeping.
- Keep travel pathways clear of mud.
- Report any signs of illness or injury to a supervisor.
- Do NOT eat, drink, smoke, or apply cosmetics (including lip balm) when working around mud.
- Keep hands safely away from moving storage bins.
- Prior to transportation, ensure mud has been tested in accordance with all local, state, and federal regulations.



Communication in the Workplace

Policy

Each person in an organization, from upper management to the lowest level of employees, is responsible for communicating with others in a way that contributes to an overall healthy and productive work environment. By applying these safe work practices, you can be assured that you are doing your part to create the best work environment possible.

- Effective communication begins with management. If you are in a supervisory position, ensure that you are communicating with your subordinates in the same manner in which you would like for them to communicate with their coworkers, your customers and yourself.
- Be direct, clear, concise and sincere when communicating with others.
- Speak to others with kindness and respect.
- Speak in even tones. Do not raise your voice to coworkers, supervisors or subordinates.
- Profanity of any kind should not be allowed.
- Avoid interrupting others when they are speaking. Allow them time to finish what they are saying before replying.
- Concentrate on what the other person has to say. Eliminate distractions such as electronics during a conversation.
- Pay close attention to your body language. Maintaining good posture and eye contact with those
 you are speaking with shows them that you are listening and that what they have to say is important
 to you.
- Avoid unnecessary repetition.
- Be appreciative. Let others know that you value their time and input.
- When differences in views or ideas occur, strive to understand them from the other person's perspective.
- Be patient and open-minded.
- Stay on topic.



Compressed Gas Safety

Policy

Compressed gases can be very dangerous, but employees can avoid any and all accidents by handling and storing them properly.

- Make sure that all compressed gas cylinders are marked properly.
- When applicable, valve protection caps should be left in place until cylinders are secured and connected for use.
- Keep cylinder valves closed at all times unless the cylinder is in use.
 - When opening cylinder valves, do so slowly and stand so that the valve outlet is pointed away from yourself and other employees.
- Never tamper with or alter cylinders, valves, or safety relief devices.
- Never tighten connections or leaking fittings, or attempt any repairs while the system is under pressure.
- Cylinders should never be subjected to extreme low temperatures or temperatures above 125 F.
- Cylinders must be used and stored away from heat sources and flames.
- Do not use or store cylinders where they become part of an electric circuit,
- Do not use cylinders as a ground during electric welding.
- Transferring compressed gases from one container to another should be performed only by the gas supplier or by authorized personnel who are qualified to use the proper equipment.
 - Non-refillable cylinders should never be refilled.
- Avoid dragging or sliding cylinders, lifting cylinders by the caps, or dropping cylinders.
- Slings, ropes, or chains are acceptable if the cylinder is equipped by the manufacturer with lifting attachments.



Computer Screen Safety

Policy

Computer screens are integral to almost all modern work processes and tasks in every industry. However, when the employee spends a significant time sitting at a computer workstation they are exposed to a variety of hazards. Following the safe work practices and ergonomic tips presented in this lesson will help ensure employee safety.

Safe Work Practices

SETTING UP YOUR WORK AREA

Many of the hazards associated with working at a computer workstation can be avoided by properly setting up your workplace. Employees should follow these tips when setting up their computer workstations:

- Ensure the computer screens are positioned a comfortable distance from where you are sitting.
 Screens placed too close or too far away may cause you to assume awkward body positions that may lead to eyestrain. The distance can vary from person to person, but the preferred viewing distance is between 20 and 40 inches.
- Position your computer screen directly in front of you, so your head, neck, and torso face forward when viewing the screen. Screens should not be farther than 35 degrees to the left or right.
- Position your computer screen so that the top of the screen is at or slightly below eye level. The
 center of the screen should normally be located 15 to 20 degrees below horizontal eye level. A
 screen that is too high or low will cause you to work with your head, neck, shoulders, and even your
 back in awkward postures.
- Tilt the screen so it is perpendicular to your line of sight, usually by tilting the screen no more than 10 to 20 degrees.

COMPUTER SCREEN ERGONOMICS

When working with a computer screen, employees should follow these safety tips:

- Have an eye exam before working regularly with a computer and once a year thereafter. Using a computer can make existing, untreated, eye and vision issues worse.
- Practice the 20-20-20 method. Take a 20 second break to look at something 20 feet away every 20 minutes.
- Ensure the ambient light of the office is not too bright. Too bright interior lights, or proximity to bright sunlight from a window, can cause a harmful glare.
 - When interior or exterior light cannot be altered consider installing an anti-glare screen.
- Adjust the text size on the screen to allow you to comfortably read. When text is too small it creates
 eye strain.



- Adjust the brightness of the screen so it is approximately the same as the brightness of your surrounding workstation.
- Consciously blink more often. When working at a computer people tend to blink far less frequently than when not working at a computer. Often eye strain is caused by the eyes becoming dry by not blinking frequently enough.
- Ensure feet sit flat on ground when sitting upright.
- Consider getting lenses for your glasses that partially block blue light.



Concrete Construction Safety

Policy

Although concrete construction has several hazards, it is possible to remain safe. As long as you are alert, use common sense, and follow safety rules and procedures, you should be able to protect yourself and others in concrete construction.

- Be sure to read the manufacturer's manual and have a legible copy of it on the machine or in an easily accessible area for reference.
- Inspect the machine before you use it.
 - Keep a record of the inspection and include the name of the person who inspected the machinery and the date and time of the inspection.
 - If part of the inspection includes testing, be sure everyone and everything is all clear before you test it.
 - If the machinery is found to be unsuitable, remove it from use and mark it to make sure that no one else uses it until it is fixed.
- Never remove any safety devices from the machinery.
- Do not ride on loads carried by machinery.
- Bend your legs, not your back, when lifting, mixing, or performing other strenuous work. This will
 make you stronger and prevent injuries to your back. If something is too heavy, ask for help carrying
 it.
- Be sure your rebar is capped or otherwise adjusted according to OSHA standards to lessen the chance of impalement.
- Do not remove framework until the concrete has cured.
- Check the ropes and bundles that transport equipment and materials to make sure they are not frayed and in otherwise good condition.
- Be sure you have the proper fall protection, whether it be guardrails or fall arrest systems.
- Have a construction plan and follow it.
- Use common sense while at the construction site.



Concrete Cut-Off Saw

Policy

A cut-off saw is a great tool for cutting concrete and metal materials; however, this tool has the potential of exposing employees to harm if it is used improperly. By following the safe work practices presented in this lesson, employees can help minimize their chances of an injury occurring while operating a cut-off saw.

Safe Work Practices

Before operating a cut-off saw, employees should do the following:

- Inspect all PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Ensure that you are wearing the appropriate clothing for the job. Do NOT wear loose clothing, jewelry or dangling objects while operating a cut-off saw. Long hair should be tied back and kept away from the moving parts of the machine.
- Inspect the saw for any damage. Report a damaged saw to your supervisor. Do NOT operate a damaged saw.
- Ensure that all guards are in place and secured. Do NOT operate a saw that is missing its guards.
- Ensure that the blade is sharp. Replace a dull blade. Use the appropriate blade for the job.

When operating a cut-off saw, employees should do the following:

- Operate the saw in accordance with the manufacturer's instructions.
- Start the saw on the ground. Do NOT drop start the saw.
- Be aware of your surroundings while operating the saw.
- Do NOT operate a cut-off saw in an enclosed space. This saw should be operated outside or in a
 well-ventilated area.
- When it is practical, use clamps or a vise to secure your work.
- Use both hands when operating the saw. Do NOT operate a saw with one hand.
- Utilize all provided dust suppression systems when cutting into concrete. Most models will use
- Only use manufacturer approved or manufacturer recommended accessories on the saw.
- Do NOT modify the saw.
- Do NOT force the saw. Forcing the saw to cut could result in kickback.
- Do NOT use a cut-off saw for cutting wood or wooden objects.
- Do NOT leave the saw running while unattended. If you need to leave the work area, turn off the saw
 and wait for the blade to come to a complete stop before placing the saw on the ground. If the saw
 is an electric model, it is recommended that employees unplug the saw after it has been turned off
 and the blade has come to a complete stop.



- Inform your supervisor if you start to feel fatigued when operating a cut-off saw. Take all designated breaks when operating a cut-off saw.
- Clean and store the saw in accordance with the manufacturer's instructions. Do NOT store a saw with the blade still attached. The blade should be stored separately from the saw.



Concrete and Cement Safety

Policy

Cement and concrete are so common it is easy to forget to follow safety procedures. However, not doing so could cause serious injury. Therefore, avoid the hazards of concrete and cement by acting safely.

Safe Work Practices

Wearing the right PPE will help you avoid the hazards of cement and concrete:

- Coveralls/Long sleeves and long pants will protect your skin from both wet and dry concrete and cement.
 - Do not let the cement or concrete soak into your clothes.
- Gloves: Wear water-proof gloves to keep your hands protected from irritation
 - Relying on barrier creams is not recommended.
- Boots: If you have to stand in concrete, be sure your boots are high enough that the wet concrete/cement will not slosh into your boots.
- Goggles: When working with both wet and dry cement, you should wear goggles to prevent dust from getting into your eyes and to prevent the wet mixture from splashing into your eyes.



Confined Space

Policy

All employees who work in and around confined spaces must be trained in order to acquire the understanding, knowledge, and skills necessary to safely perform their assigned duties. Knowing the hazards involved, rescue procedures, lock-out/tag-out and the use of protective equipment will provide a safer work environment.

Safe Work Practices

SAFETY PRECAUTIONS

- Make sure any employee entering into a confined space has been trained and certified in the type
 of confined space they will be entering.
- Before entering a confined space, all mechanical equipment must be locked-out, blocked-out and tagged-out.
- Test the air before entering and periodically as you work.
- If there are any hazards in the confined space, then it is a "Permit-Required" confined space and entry is allowed by following your company's confined space permit program.
- Have the proper ventilation for the confined space. Portable self-contained breathing devices and forced air ventilation (FAV) are examples of proper ventilation.
- Wear the proper protective clothing for the type of confined space you are entering.

ROBOTS (IF APPLICABLE)

- When possible, a robot or drone should be sent inside the confined space instead of a person.
- Inspect the robot or drone for malfunctions or broken parts. Report any malfunctions or damage to your supervisor. Do NOT use a damaged robot or drone.
- Only a person who has been trained should operate the robot. Ensure that you are complying with all the manufacturer's instructions when operating a robot or drone.



Confined Space: Air Testing

Policy

If you have a confined space in your workplace, you should be aware that you are required to test the air quality periodically. Employees who are designated to test the air quality must do so at specified intervals and in the correct manner to protect the health of those who may enter.

- Air quality must be tested before entry, re-entry, and throughout entry as needed ESPECIALLY when:
 - Work begins on a different portion of the site.
 - o Different contaminants are being handled.
 - A different task is started (e.g., barrel opening as opposed to exploratory well drilling).
 - Workers are handling leaking drums or working in areas with obvious liquid contamination (e.g., a spill or lagoon).
- The following are the acceptable atmospheric levels:
 - Oxygen between 19.5 and 22.0 percent.
 - Flammable gasses or vapors below 10 percent of the lower explosive limit.
 - Toxic gasses or vapors below the permissible exposure limit for each toxin.



Confined Space: Monitor

Policy

Confined space attendants have an important role in a confined space team. They monitor both the entrant and conditions (both inside and outside) of the confined space, so that the entrant may perform their job in a safe manner. One thing that all members of a confined space team should remember is that self-rescue is the best rescue. If the attendant uses the safe work practices provided, then they can help ensure the entrant's safety while on the job.

- Inspect all lowering equipment for any damage. Report any damaged equipment to your supervisor or competent person. Do NOT use damaged equipment.
- Know the results of any prior air monitoring test. Depending on the confined space, continuous air
 monitoring might be needed. During such situations, the attendant should know how to operate any
 air monitoring equipment that they have been given and how to record the data.
- All natural and mechanical ventilation should be on before, during, and after the operation.
 - Exception: all ventilation should be turned off when air monitoring testing (a.k.a. a sniff test) is being performed. This is to ensure the accuracy of all testing results.
- Be familiar with all the potential hazards of the confined space. This includes any behavioral changes that may occur due to the entrant being exposed to the hazards.
- Only allow authorized entrants into the confined space area. If it is a permit required area, you should check and record anyone who enters the area. Inform both the supervisor and entrant of any unauthorized personnel who are in the area.
- Do NOT allow unauthorized personnel to stay in the area. If you need to, have another employee escort them out of the permit area or have the supervisor escort them out.
- Ensure that the entrant is wearing all required PPE. This includes the entrant wearing his or her harness and lifeline (if applicable) before they enter or exit the confined space.
- Do NOT enter the confined space for any reason. You should remain outside the confined space at all times.
- Do NOT leave your assigned area until the job is either finished or you are replaced by another
 qualified attendant. Inform your replacement of any changes that you noticed. Inform the entrant that
 you are being replaced.
- Do NOT hand tools or equipment to the entrant unless it is an emergency.
- You should monitor conditions both inside and outside of the confined space.
- Keep in constant communications with the entrant. If the entrant stops responding, pull on the lifeline or harness and call for both rescue and medical assistance.
- You should keep a form of mobile communication (cell phone, walkie talkie, etc.) on you at all times during your shift.
- If you feel that something might be endangering the entrant, order him or her out of the confined space. The entrant must follow any evacuation order that you give them.



• Call for the rescue team and medical assistance immediately when you can not pull the entrant out or the entrant cannot exit on their own.

Confined Space: Non Permit Required

Policy

A confined space is any space that has limited openings for entry and exit and is not designed for continuous worker occupancy. There are two main types of confined spaces and employees should know what type of confined space they will be entering before they enter it, and what kind of safe work practices are required to keep themselves safe in the confined space.

Safe Work Practices

BEFORE ENTERING

Before entering a non-permit required confined space, a contractor must verify that:

- The space poses no actual or potential hazardous atmospheres.
- All hazards within the space can be eliminated without entry into the space, such as locking and tagging equipment so it cannot be operated while employees are inside.
- Forced-air ventilation is not required to control atmospheric hazards.
- Once these things are verified, there must be a certificate made available to employees with the date, location of the space and name of the person certifying the space.

SAFETY PRECAUTIONS

Once a confined space is determined to be a non-permit required space, employees who enter must know and follow the appropriate safe work practices, such as:

- Never enter the confined space unless there is a minimum of two people in the entry team. This
 should consist of an attendant and the entrant.
 - Attendants and entrants must both be trained on confined space entry.
- Atmospheric testing should be done before entry and periodically thereafter with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order.
- The entrant should move slowly and carefully through the confined space.
- Entrants and attendants should have a means of communication throughout the entry.
- Employees must wear the proper clothing for the type of confined space you are entering.
- Leave the space immediately if an unexpected hazard is encountered.
 - In the event of an unexpected hazard, a contractor must determine if the space needs to be reclassified as a permit-required confined space.
 - Entry can continue if the hazard(s) are eliminated.



Connecting High Pressure Pipes to Hoses

Policy

Connecting hoses to a pipe or tank can be dangerous. The danger comes from the potential material that an employee may be exposed to during the connection process. Employees can minimize the potential exposure to hazards of connecting a hose to a pipe or tank by utilizing the safe work practices provided in this lesson.

- Ensure that you are complying with the manufacturer's instructions for the proper way to store, cut, and handle the hose.
- Inspect the hose for damage. This includes looking at all connectors, couplings, quick connects, etc. Report any damage to your supervisor. Do NOT use a damaged hose, connector, coupling, or quick connect.
- Check the hose's psi to ensure that the hose will be appropriate for the psi of the pipe or tank.
- Match the hose color to the material and temperature that the pipe or tank will be transporting or holding.
- Ensure that you are using the appropriate length of hose for the required job. If the hose needs to be cut to the appropriate length, ensure that you use a sharp knife. Do NOT use a dull knife.
- Do NOT touch a blue hose unless you have been trained in how to handle and connect it properly. A blue hose should only be used for chemicals.
- Use proper ergonomics or mechanical assistance when lifting a larger hose. Ask for assistance with lifting if you feel the hose is too big or heavy to lift on your own.
- Avoid dragging the hose whenever possible. Hoses that are larger than the average garden or commercial hose should NOT be dragged at all. Such hoses should be transported by a hose dolly or other mechanical device.
- Do NOT overtighten connectors or couplings. You could damage these parts, which could result in a leak.
- If a quick connect is being used, ensure that the hitch pin has been put into place.
- Once the connection has been made, test the hose for leaks. Water should be the preferred liquid for testing, especially if the piping system or tank is empty at the time of connection.
- Should a hose leak during the testing process, clean up that leak in accordance with local and federal law (chemicals). Consult the Safety Data Sheet (SDS) for proper clean up procedures for chemicals.
- Before leaving the area, inspect the connection one last time to ensure that nothing has leaked out or come loose during the testing process.



Construction Barricades and Warning Devices

Policy

Barricades, signs and lights are important to the safety of the traveling public. Never move a barricade, sign, cone, drum, etc. unless necessary and remember to replace it when finished with your work. If you see a broken or misplaced barricade, light or sign, fix it or report it to your supervisor.

- Give the public plenty of warning by use of signs.
- Make sure warning devices can be seen and are effective.
- Use flagmen on narrow passages or when construction vehicles will be interacting with the public traffic flow.
- Maintain all barricades and signs.
- Give the site a buffer area.
- Clearly mark the beginning and end of the construction area.
- Illuminate all barricades and obstructions from sunset to sunrise.



Construction Site Operations

Policy

Safety on a construction site is everybody's responsibility. Following the established guidelines set forth by the company, as well as these safe work practices will help to ensure the safety of every employee.

- Only properly grounded electrical tools should be used, if insulation is frayed or deteriorated, discontinue use.
- Tools should be in good working order, faulty or worn tools should not be used.
- Only trained and authorized employees should operate machinery or equipment.
- Employees should be familiar with the location of all exits, alarms, fire extinguishers, first aid kits, and telephones.
- Hand carts or other handling equipment should be used to move heavy loads.
- Employees should assist each other, especially new employees in safely performing their work.
- Warning signs should be obeyed at ALL times.
- Safety devices should not be modified.
- Get help lifting when the load is too heavy to handle alone.



Construction: Mental Health

Policy

Construction industry employees are just as likely to be living with or experiencing mental illness as employees in other industries. It is important for employees who see or are living with or experiencing mental illness to reach out. Reaching out can be as simple as offering support or helping those affected seek treatment. Mental illness can be managed and treated.

Safe Work Practices

SYMPTOMS OF MENTAL ILLNESS

Changes in feelings or actions are normal occurrences for everyone; however, changes in feelings or actions that continue for two or more weeks may be indications of mental illness.

Mental illness can appear in people differently. Mental illness can amplify emotions or cause changes in behavior. Signs of mental illness can include some of the following:

- Feelings of worry or fear.
- Having problems concentrating or experiencing confusion more than normal.
- Feeling flat or numb.
- Feeling or displaying extreme mood changes.
- Feeling angry, irritable, or aggressive.
- Being unconcerned with your appearance.
- Feelings of sadness or hopelessness.
- Feeling low or excessively tired.
- Having trouble relating to others.
- Avoiding friends or social activities.
- Change in sleeping habits.
- Uncontrollable thoughts of a traumatic event.
- Changes in eating habits including increased hunger or lack of appetite.
- Thoughts of suicide.
- Change in sex drive.
- Difficulty perceiving reality including delusions or hallucinations.
- Physical problems such as headaches, racing heart, stomach aches, unexplained aches and pains that have no obvious cause.

REACHING OUT



Friends and coworkers play an important role in helping encourage those living with or experiencing mental illness to seek support and treatment. If you, a friend, relative, or coworker is experiencing any of the following, please reach out for help:

- Having a hard time recognizing their own unusual behavior.
- Abusing drugs or alcohol.
- Seeming unable carry out daily activities or handling daily problems and stress.
- Talking about suicide.

SUPPORT AND TREATMENT

Mental illness can be managed and treated. Treatment for the most common conditions of mental illness are effective 80% of the time. Treatment should be done with the help of a professional such as a doctor, psychologist, or licensed mental health provider. Depending on the individual needs, treatment plans may include any of the following:

- Peer support
- Medication
- Therapy sessions (one-on-one, or with a small group)

If you or someone you know needs help finding treatment options, you can:

- Ask your doctor
- Call 1-800-273-HELP (4357)
- Text: 1-800-487-4889
- Visit: https://findtreatment.samhsa.gov/

If you or someone you know is a veteran and is in crisis or needs help finding treatment options, please contact one of the following numbers:

- Veterans in crisis Call: 1-800-273-8255 and Press 1 or text 838255
- Treatment options Call 1-866-966-1020

If you, a friend, relative, or coworker are in crisis and experiencing thoughts of suicide:

- Call (or direct a person to call): 911
- Call (or direct a person to call): 1-800-273-TALK (8255)
- Text: 1-800-799-4889
- Go to the nearest emergency room



Construction: Working at Night Safety

Policy

The primary risks of nighttime construction work are reduced visibility and employee drowsiness. However, night work can be safe for workers with adequate rest, safe work practices, and employee involvement.

- Get an adequate amount of rest before a shift.
- Report any hazards or concerns to your supervisor.
- Always wear the appropriate attire and PPE such as visibility vests and work boots.
- Always be aware of any heavy machinery or equipment that is in use.
- Operators should always know where employees are.
- All safeguards, such as traffic control safety devices should be in place.
- Be alert, stay clear, and obey warnings.
- Be active in all safety meetings to understand the job and its hazards.



Conveyor Belt Safety

Policy

Employees who work or around conveyor belts must be fully aware of the hazards involved, as well as the safe work practices that can be used to reduce those hazards. Any employee found not observing the safety rules will be subject to disciplinary action.

- Dos
 - Ensure that all personnel are clear of equipment before starting
 - Keep clothing, body parts, and hair away from conveyor.
 - o Operate equipment only with all guards in place.
 - Know where the automatic shut-off switch or lever is.
- Don'ts
 - Sit, stand, walk, or ride the conveyor.
 - Perform maintenance until all energy sources have been locked out.
 - Wear loose or baggy clothing.
 - Overload the conveyor.
 - Load a stopped conveyor.



Core Drilling Safety

Policy

Drilling holes in masonry with a core drilling machine can be very dangerous. Workers who do this job may be exposed to risks from dust, flying debris, high noise levels, slippery surfaces and even falling from heights if the work area is elevated. You are required to follow all safe work practices to avoid harm from any of these risks.

- Verify that the core cutter is compatible with the arbor and guiding drill bit that you will be using.
 - The diamond core bit must also be compatible with the material being drilled.
- If drilling second story floors or floors of suspended slabs, the area below must be properly secure to avoid anyone from walking into the area of falling cores.
 - If it is possible to do so safely, take measures to catch the core directly after drilling.
- Do not use jerky movements when drilling to avoid snagging the teeth of the drill.
- If instructed by the manufacturer for the material and type of bit used, water must be sprayed on the work surface while drilling to reduce friction.
- If using anchors to give more support, employees should make sure the concrete is strong enough to support the drill where the anchors are placed.
- If using suction vacuum pads to secure the drill to the floor, proper suction to the floor must be confirmed before starting the drill motor.
 - Do not attempt this on floor types that are not recommended by the manufacturer.
- Never attempt to remove the core by banging the drill on stationary objects or putting a wrench or other tool inside the bit and then starting the drill.
- When lifting the drill onto a wall for mounting, mount the stand to the wall first then slide the carriage onto the stand to eliminate muscle strain.
- Never stand on the drill stand to secure it in place.



Cranes

Policy

Fatalities and serious injuries can occur if cranes are not inspected and used properly. Many fatalities can occur when the crane boom, load line or load contacts power lines and shorts electricity to ground. Other incidents happen when workers are struck by the load, are caught inside the swing radius or fail to assemble/disassemble the crane properly.

- The manufacturer's instructions must be followed when operating the crane. Attach the load to the block hook by means of slings or other approved devices, making sure the sling is clear of all obstacles. Once the load is properly secured and balanced in the untwisted sling, slowly raise the load. Horizontal movement must also begin slowly to prevent the load from swinging or coming into contact with other obstacles.
- The crane warning signal or horn must be sounded when the load or hook comes near or over personnel. Carrying loads over personnel is not recommended. A load should not be left suspended.
- Audible and discernible voice communication should be kept with the operator at all times. If this
 cannot be accomplished, a signal system should be used. Standard signals should be used;
 however, it may be necessary to create special signals in certain circumstances. In these
 circumstances, the signals must be understood and agreed upon by all individuals using the crane.
- Cranes are to be operated only by qualified and trained personnel.
- A designated competent person must inspect the crane and all crane controls before use.
- Be sure the crane is on a firm/stable surface and level.
- During assembly/disassembly do not unlock or remove pins unless sections are blocked and secure (stable).
- Fully extend outriggers and barricade accessible areas inside the crane's swing radius.
- Watch for overhead electric power lines and maintain at least a 10-foot safe working clearance from the lines.
- Inspect all rigging prior to use; do not wrap hoist lines around the load.
- Be sure to use the correct load chart for the crane's current configuration and setup, the load weight and lift path.
- Do not exceed the load chart capacity while making lifts.
- Raise load a few inches, hold, verify capacity/balance, and test brake system before delivering load.
- Do not move loads over workers.
- Be sure to follow signals and manufacturer instructions while operating cranes.



Cranes: Lifting

Policy

A lift operation goes smoothly, and accidents and injuries are minimized, when the safe work practices are followed.

- All crane operators should read and the understand the operator's manual for their crane.
- Any crane operation should have a preplan in place for the lift operation.
- The crane hook should be inspected for broken or malfunctioning parts. Inspect all the rigging equipment.
- The crane operator and the signaling person should be clear on the hand signals.
- Cranes need to be kept at specific distances from powerlines. Please consult the provided chart for those distances.
- Do not operate a crane in high winds or other hazardous weather conditions.
- Do not overload the crane.
- Ensure that all loads have been secured tightly as to avoid material dropping during lift operations.
- All personnel not involved with the lifting operation should keep their distance.
- Before lifting or lowering a load, the crane operator should inspect the area around the landing/lift site to ensure that no one is under the load.
- The crane operator should allow any personnel who is connecting the load to the crane to safely exit the area before proceeding with the lift.
- The lifting path should be cleared of all debris and obstructions.
- All personnel should avoid being under the load.
- Lifting or lowering should only be done based on the hand signals given to the crane operator.
- Depending on the load, someone else should be on a guiding/tag line for the load.
- All rigging should be removed from the crane when the job is finished.
- When finished, the crane hook should return to original resting position.

Voltage (nominal, kV, alternating current)	Minimum Clearance Distance (feet)
Up to 50	10
Over 50 to 175	15
Over 175 to 350	20
Over 350 to 550	27
Over 550 to 1,000	45
Over 1,000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution)



Cranes: Sling Crane Operation

Policy

Safety with sling cranes involves knowing what types of slings to use, how to use them, and how to safely operate cranes. Knowing these things and putting them into practice will help prevent accidents and keep your work site safe.

- Inspect your slings before you use them.
- Set the slings to avoid slippage.
- Pad or protect the slings from the sharp edges of their loads.
- Keep the loads clear of all obstructions.
- Do not use damaged or defective slings.
- Do not use slings that are kinked or knotted.
- Do not load the slings with more weight than they can handle.
- You can find how much weight your sling can handle by looking at the identification markings that must be permanently attached to every sling.
- Do not put hands or fingers between the sling and its load while the sling is being tightened around the load.
- Do not shock load (when there is a sudden stopping of the load, rapid acceleration of the load, sudden load release or sudden load snatching).
- Shock loading wears the equipment down faster, meaning that a load that would otherwise be within the capacity of the sling could cause the sling to break.
- Do not use deformed or defective hooks or rings.



Cranes: Standard Hand Signals

Policy

When you use a crane or boom truck you want the load to be placed safely. You need to be able to quickly and efficiently communicate to the operator exactly what it is you are trying to do. Fortunately, there is a universal language for directing crane movements...The Standard Hand Signals. These same signals are officially used all over the world. A crane operator should always move loads according to the established code of signals, and use a signaler.

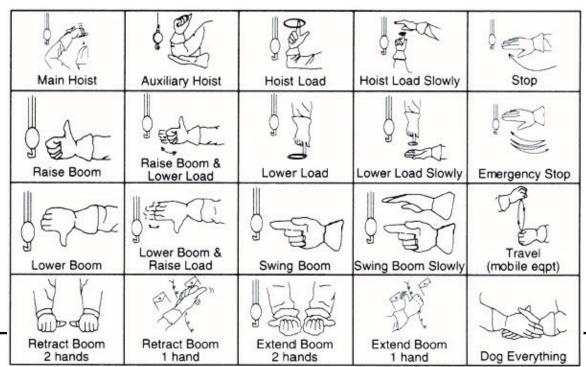
Safe Work Practices

WHO CAN GIVE THE HAND SIGNALS?

- There should be only one designated signaler at a time.
- If signalers are changing between each other, the one in charge should wear a clearly visible badge of authority.
- A crane operator should move loads only on signals from one signaler.
- A crane operator must obey STOP signals no matter who gives it.

WHAT SHOULD YOU DO WHEN IN CHARGE OF SIGNALING? The signaler must:

- Be in clear view of the crane operator.
- Have a clear view of the load and the equipment.
- Keep persons outside the crane's operating area.
- Never direct a load over a person.



Cuts, Lacerations and Punctures

Policy

Cuts, lacerations and punctures are wounds that are unfortunately very common in many workplaces. All of them are open wounds that not only are dangerous when first received, but also create a greater vulnerability to infection of the human body. Twenty-nine percent of the cut, laceration, and puncture wounds reported involve work equipment. Therefore, to avoid receiving any of these wounds, remember the following instructions.

- When cutting thick material, use several passes of the blade and apply more downward pressure with each pass
- Be sure you are properly trained before using.
- Use the proper PPE such as gloves and boots when working with processes that could cause cuts, lacerations, and punctures
- Practice good housekeeping by getting rid of clutter and debris
- Never use a tool for a purpose other than what it was meant to be used
 - For example, do not use a screwdriver as a chisel or a knife as a pry bar
- Do not use tools in poor condition, such as a broken handle or a dull blade
- Do not place sharp objects in your pockets, belt, or pants
- Inspect machinery on a regular basis to be sure the machine guards are working and in place
- Do not take shortcuts
 - Always focus on your work



Defensive Driving Practices

Policy

Driving is always going to be a hazardous task. Employees can help protect themselves and others from accidents by practicing defensive driving. Defensive driving is not difficult to learn, and it has long-term benefits. The defensive driving practices provided in this lesson can help protect employees both at home and on the job.

Safe Work Practices

LOOK AHEAD

- Glancing at your intended lane of travel continuously while driving.
- Looking at the spot where your vehicle will be in 15 seconds or longer. In inclement weather, drivers should add more seconds on to their initial 15-20 seconds depending on road conditions.
- Watching the vehicle not only in front of you, but the vehicles that are driving in front of that vehicle. The vehicles that are further ahead will impact how the drivers behind them will act.
- Looking at traffic that are in the other lanes that are ahead of you.

BE AWARE OF YOUR SURROUNDINGS

- Locating motorcycles or bicycles that may be to the side, in front of, or behind your vehicle.
 Locating these riders is important because they have an easier time moving around traffic than other vehicles. Ensuring that you give all motorcycles and bicycles sufficient space to avoid accidental collision.
- Identifying the location of pedestrians. Watching pedestrians is important because they may have not seen your vehicle when crossing a street or jogging on the side of the road.
- Noting and preparing for changes in the speed limit.
- Accounting for the stopping time and loads of other drivers. Put some extra distance between your vehicle and those vehicles that have trailers or other items, such as boats, attached to the rear.
 These items may come loose and detach during travel.

SCANNING THE AREA AROUND YOUR VEHICLE

- Continuously looking to the front, rear, and sides of your vehicle.
- Checking your mirrors every few seconds. Your mirrors play an important part of informing you of where other vehicles and pedestrians are located.
- Keeping distractions like cell phones, laptops, tablets, etc. stored during travel. Your eyes are
 meant to be scanning the area around your vehicle for hazards. They can't do that if you are looking
 at a screen.

PREPARE FOR "WHAT IFS" AND EMERGENICES



- Leaving a sufficient amount of space between you and other vehicles. The more amount of space between you and another vehicle, the better.
- Leaving one lane to the side of your vehicle open for swerving or exiting.
- Watching and predicting the behaviors of other drivers.
- Avoiding "herds" of vehicles.

ALERT OTHER DRIVERS TO YOUR PRESENCE

- Staying out of other driver's blind spots.
- Making eye contact with other drivers.
- Using your signals when changing lanes and making turns.
- Using your headlights when conditions are dark or in inclement weather.
- Ensuring that your brake lights are in working order. Other drivers cannot brake for you if they do not know that you are braking.
- Use your horn to warn others that you are backing up or to get their attention. Do NOT use your horn to express anger.



Developing Good Work Habits

Policy

Developing good work habits is essential to proving your worth in any company. Good principles are what make the foundation for a good employee, and you will be valued by your employer if you understand the importance of making a contribution. Three aspects of having good work habits are attendance organization, and productivity.

- Clean up and get organized.
- Manage your time and work load efficiently.
- Plan your activities and emphasize important tasks.
- Concentrate on one key task at a time.
- Work at a steady pace.
- Recognize and apply quality standards.
- Handle responsibility in a dependable manner.
- Carry out instructions promptly.



Diesel Spill Safety Procedures

Policy

It is every employee's responsibility to ensure that any leaked or spilled diesel fuel is cleaned up properly and in a timely manner. If a leak or spill is left unattended, the fuel could go down a drain or catch on fire, resulting in more damages and potential fines. Employees should remember to put on PPE before attending to any spills. If employees utilize the safe work practices provided in this lesson, they will find that they minimize the risk associated with diesel fuel spills and leaks.

Safe Work Practices

Cleaning up a spill or leak in a timely manner is important. For a spill or leak to be cleaned up in a timely manner, employees should know the following before a leak or spill occurs:

- Know the location of all spill kits. Spill kits should be kept in an area that is easy to access.
- Know what a spill kit contains. Personal protective equipment will vary between spill kits based on the material that was spilled or leaked.
- Drivers should keep a spill kit in all company transport vehicles at all times. Spill kits should be kept in an area of the vehicle that is easy to get to and items should not be stored on top of them whenever possible.

When a spill or leak occurs, time is of the essence. Nobody wants to have diesel fuel enter any drains or waterways. Employees should do the following when cleaning up a spill or leak:

- When a leak or spill is brought to your attention, you should grab the spill kit and put on the personal
 protective equipment (PPE) that has been provided. Take a quick second to inspect the PPE for
 damage. If the PPE has been damaged, report it to your supervisor.
 - If your company does not have a spill kit, grab some rubber or heavy-duty disposal gloves, kitty litter or some other absorbent material, a heavy-duty plastic bag (garbage bags would be best), broom, and dust pan. Wearing goggles is optional, but may be required by employer.
- Stop the source of the leak or spill.
- Block off the area where the spill occurred to prevent others from entering the area during clean up.
- The leak or spill should be surrounded by absorbent socks. If you do not have absorbent socks, use
 kitty litter or some other absorbent material around the edge of the spill or leak to prevent it from
 spreading further.
- If possible, cover or block drains to ensure that no diesel fuel enters the drain.
 - If you notice that diesel fuel has entered a drain or some other source of water, report it to your supervisor as soon as possible as the EPA or other agencies will need to be contacted.
- Follow the spill kit directions for the use of absorbent pads or absorbent granules.



- Once all fuel has been cleaned up, ensure that the container for the used material has been labeled as hazardous waste and dispose of it in accordance with local and federal law.
- Report the spill to your supervisor. When possible, have another coworker report the spill to your supervisor while you clean up the spill or leak. If you do have another person report it, you should still go to your supervisor to provide additional information about the spill or leak.



Directional Boring: Underground

Policy

Directional boring is a trenchless method of installing underground pipes, cables, and conduits with little to no impact on the surface area. This is also known as horizontal directional drilling. Like any part of a construction project, this method does carry some risks. Following the safe work practices presented in this lesson will help ensure employee safety.

- Read and understand the operator's manual for your specific machine.
- Contact the utility company and mark the location of utility lines.
- Walk around the machine, inspecting for broken or malfunctioning parts.
- If any broken or malfunctioning parts are found, inform your supervisor and do not use the machine.
- If a utility line is hit, stop working and contact the utility company.
- Mark the entrance and exit pits.
- Maintain contact between the drill operator, locator, and tracker.
- Never assume depths of utility lines.
- Keep everyone at least 10 feet away from the machine.
- Before moving the drill, double check on the location of all of your coworkers and make sure that you can see down the chosen path that you will take the drill.
- Have a clear path in which to move the drill.
- Do not push the drill string without routing.
- Steering should only be done with direction from the tracker.
- Set up a barrier in front of the machine.
- Log the bore.
- If you need to change a pipe box, make sure that all pins have been installed.
- Check for overhead obstructions.
- The lifting machine needs to be certified for the pipe box weight.
- Tracking of the drill head should be done every half to full length pipe.
- Mark locations with white paint.
- Pull drill string back if it cannot be tracked.
- Do not enter a pit until the drill has stopped both thrust and rotation.
- The reamer must be up to the borehole before rotating, when pulling back cables, pipes, and/or conduits.
- Clean up any excess drilling fluid and cuttings.
- Make sure that the machine is turned off when finished.



Discrimination in the Workplace

Policy

Discrimination is something that should not be tolerated in any workplace. It is up to both employers and employees to ensure a safe work environment for everyone. Everyone needs to remember that people want to be treated with respect and professionalism. Discrimination is something that can and should be prevented. Discrimination laws are evolving all the time, so everyone needs to ensure that they are informed about any changes to all local and federal law.

Safe Work Practices

HOW CAN YOU PREVENT DISCRIMINATION?

Employers and employees can prevent discrimination by:

- Providing handbooks that outline and discuss the company's policies in regard to behaviors and
 practices that will not be tolerated. Employees should carefully read and understand nondiscrimination policies in the handbook. If an employee has questions, they should ask questions to
 their supervisor or human resources department.
- Providing anti-discrimination training to all management staff and regular employees. Employees should attend all required anti-discrimination training and take opportunities to attend additional training if it is offered.
- Encourage ideas of respect and professionalism.
- Grant reasonable accommodations when they have been requested.
- Encourage meetings between parties before issues escalate.

HOW CAN I TELL IF DISCRIMINATION IS TAKING PLACE?

There are some situations when an employee, manager, or supervisor is unsure about a behavior or action that may be an indicator of discrimination. Listed are some signs that may be indicators of discrimination:

- Hiring practices that disallow certain individuals or groups from applying for the job or from being offered the position in which they applied.
- When a rule or policy is not applied to everyone equally.
- When a reasonable accommodation for a disability or religious belief is not granted.

Unless it would cause undue hardship to the company.

- Jokes that are shared that might offend someone.
- Behavior that humilities or degrades someone. This behavior might be repeated over and over again.



 Someone not getting a promotion or raise based on the fact that they belong to a protected category.

WHAT CAN AN EMPLOYEE DO IF THEY FEEL THAT THEY ARE BEING DISCRIMINATIED AGAINST? If an employee feels that they have been discriminated against, they should talk with or file a complaint with either their supervisor or human resources department. Should the behavior not be stopped or an employee becomes a target for retaliation (it is another form of discrimination), he or she can file a complaint with the local Equal Employment Opportunity Commission (EEOC). The EEOC can and will investigate all complaints about workplace discrimination and they can act as mediators between the parties involved.



Driver Vehicle Inspection

Policy

To help protect themselves and the public, employees who drive a commercial motor vehicle (CMV) should conduct a driver vehicle inspection prior to hitting the road. Driver vehicle inspections help drivers identify and correct damaged or suspected problems with a vehicle before the vehicle is on the road.

Safe Work Practices

When performing a driver vehicle inspection, employees should use their company's driver vehicle report and mark items that are defective or in need of repair. Forms can differ between companies, so employees should fill them out according to their company's policy.

When performing a driver vehicle inspection, employees should do the following:

- Chock the tires (if applicable).
- Remove the key from the vehicle and put it in your pocket.
- Do NOT smoke while performing a driver vehicle inspection.
- Take a visual overview of the portion of the vehicle that they are inspecting (Employees should start at the front of the vehicle and work their way towards the back.)
 - When performing a visual overview, employees should look to see if the vehicle is leaning.
 Leaning vehicles could indict flat tires or other problems.
- Be aware of areas that may be hot. Hot areas will normally be a concern when performing on-theroad or post-trip inspections. Hot areas include batteries and engine areas.
- Ensure that all fluids are at appropriate levels. Top fluids off as needed.
- Note all fluid leaks. Leaks should be cleaned up as soon as possible to prevent someone from slipping and falling. Leaked fluid should be cleaned up in accordance with all local and federal laws.
- Mark and make notes of defective items on the driver vehicle inspection report (DVIR) as you
 conduct the inspection.
- Wheels should be checked for illegal welds. A wheel should be marked as defective or damaged if
 it has been welded.
- Ensure that tires have the appropriate amount of tread. Tires should be marked if they do not have the appropriate amount of tread remaining.
 - If your vehicle has dual tires, you should inspect the gap between the tires for debris. Debris should be removed before leaving the inspection area.
- Ensure that gauges are working properly during the inspection. Improperly working gauges could indicate a problem with the vehicle or the gauge.
- Ensure that seatbelts latch. Do NOT just look at them.



- It is recommended that employees get assistance when checking the lights. One person should be in the cab of the vehicle while the other person looks at the lights to ensure that they are on.
- Remove chocks before performing any movement checks when inspecting brakes.
- Turn in your completed report as directed by your supervisor.



Driverless Tractor Safety

Policy

Whether you are operating a self-driving tractor or not, all safety procedures must be followed to reduce the risk of injury or accidents. Under no circumstances should an employee leave the controls unless all requirements have been met and the machine is intended to be used as a self-propelled machine.

- All guards must be kept in place when the machine is in operation.
- No riders are allowed on agricultural equipment other than the those required for instruction or assistance in machine operation.
 - A proper seat with a seatbelt must be available for these riders.
- Before servicing, adjusting, cleaning, or unclogging equipment, employees must stop the engine, disconnect the power source, and wait for all machine movement to stop.
 - The only exception is when the machine must be running to be properly serviced or maintained, in which case all steps and procedures that are necessary to safely service or maintain the equipment shall be taken.
- Maintain your level of alertness by taking breaks at regular intervals.
- Operators must make sure everyone is clear of machinery before starting the engine, engaging power, or operating the machine.



Driving Company Vehicles: Breaking Down

Policy

If you are in an accident or your vehicle breaks down while driving a company car, there is a certain protocol to follow. Employees' safety is the first priority in a situation like this, and all safety steps are required to be followed so the problem can be solved as quickly and safely as possible.

Safe Work Practices

BREAKING DOWN

- Do not pull into the left-hand shoulder unless there is no other option.
- Turn your hazard lights on as soon as you are stopped to warn other drivers to be cautious.
- Turn your wheel away from the road and put the emergency brake on.
- Do not get out of the vehicle unless you have checked that it is completely safe to do so.
 - Get out through the passenger-side door if you are parked next to a busy road or highway.
 - Stay near your vehicle unless your engine is smoking or you see flames.
- Call 911 if you are hurt or unable to pull to the side of the road.
- If you have flares or triangles available, set them up. One should be placed about ten feet behind your vehicle and the other should be placed about 200 feet behind the vehicle.
- Pop your hood to reduce confusion, because this is the universal sign of a breakdown.
- Do not attempt to fix the problem by yourself if you are not sure what the problem is.

ACCIDENTS

- Check yourself, passengers, and the other affected party for injuries, and call 911 if necessary.
- Pull over to a safe location, turn your hazards on, and set your emergency brake.
- Set up traffic flares, cones, or triangles as previously described.
- Call the police even for a minor accident.
- Exchange insurance information with the other driver.
- Do not admit fault and limit your discussion of the accident to facts.
- Take pictures of the damage, if possible.



Driving Industrial Vehicles

Policy

All operators of industrial vehicles should be prepared for a safe day behind the wheel. They should know the vehicle or moving equipment they are going to be using and should observe the operating, maintenance and safety instructions.

- Be attentive.
- Do not operate an industrial vehicle or equipment if drowsy, under the influence of alcohol or drugs. (Some prescription drugs could make you drowsy.)
- If you are ill, operating industrial vehicles should be limited or avoided.
- Take occasional breaks, especially on hot days.
- Operators should dress appropriately for the weather and work conditions, including head and eye protection.
- Dust respirators and acoustic earmuffs or plugs may be required if a vehicle does not have a
 protective cab.
- Seat belts should always be securely fastened.
- Passengers should only be in the vehicle if there are seat belts for them. No seat belt, no rider.
- No one should ride on any part of a moving vehicle that is not designated for a passenger.
- Vehicles should match ground speed to operating conditions.
- When a vehicle is stopped, brakes should be securely set, using a park lock and remove keys to keep unauthorized persons or children from restarting the machinery.
- Operators should disengage the power take off, keeping shields and guards in place and turning off the engine before unclogging, refueling or working on any power-driven machine.
- Operators should make sure other workers are out of the way and that they never walk under or alongside moving equipment.



Driving Safety

Policy

Automobile accidents are a leading cause of injury to employees, as well as lost time and equipment to employees. Drivers should be prepared to drive safely every time they are behind the wheel of a vehicle.

- Seat belts should be worn by the driver and passenger(s) any time the vehicle is moving. If there are no passenger seats, there should be no riders.
- Avoid using cell phones, programming GPS or reading maps while driving. Pull off of the road to do any of these activities.
- Only those with an active driver's license should operate a vehicle.
- All traffic laws and speed limits should be obeyed under all circumstances
- Do not drive while under the influence of alcohol or drugs. (Prescription medications which can impair judgment are included.)
- When the vehicle is parked, brakes should be set.
- Do NOT text while driving.
- Do NOT use a cell phone without a hands-free device.



Driving Vehicles with Trailers

Policy

Towing a trailer requires a lot of extra precaution than just driving a regular vehicle. Remember to properly and safely load the trailer, drive extra cautiously, and always properly prepare and inspect the trailer before you take it anywhere.

Safe Work Practices

PREPARATION

- Know the specifications of your vehicle, hitches, etc. before you tow a trailer.
- OSHA requires the driver to check the vehicle at the beginning of each shift.
- Inspect the trailer and its connections.
- Know what the GTW is and be sure it is not more than the trailer can carry or more than the vehicle can tow.

DRIVING SAFELY

- Always wear your seatbelt.
- Prevent Trailer Sway.
- Never speed or accelerate too guickly.
- Do not make sharp turns; otherwise the trailer could jackknife or tip over.
- Make sure you allow enough space for the trailer when you turn.
- Allow more distance between the cars in front of you than you usually would have.
- Inspect the trailer and your vehicle every time you make a stop to make sure everything is still in working order.
- Slow down when driving on railroad crossings or unpaved roads.
- Use a spotter to help you back up the trailer.

LOADING AND UNLOADING

- When you are about to load or unload a trailer, be SURE that the brakes are on, the vehicle is off, and any stabilizers are used.
- Do not overload the trailer.
- Put heavier items on the bottom so the trailer does not become top heavy and cause it to overturn.
- Make sure each side of the trailer is balanced as well.
- Cover and tie down the objects in the trailer to prevent them from flying off or falling out.



Driving in Inclement Weather

Policy

There are many potential hazards than can occur while driving. Especially when driving in rainy or foggy conditions. Extra precautions should be taken while driving in inclement weather.

- Do not use cruise control while driving in wet conditions.
- Drive at least 5 MPH under the speed limit, and even slower if necessary.
- Feather the brakes when driving through a puddle to avoid hydroplaning.
- Never drive through flooded areas:
 - It is hard to gauge the depth of the water.
 - If water gets into intake valve it could shut down engine.
- If the vehicle starts to hydroplane remember the following:
 - Take your foot off of the accelerator.
 - Gently turn steering wheel in the direction vehicle is hydroplaning.
 - Feel to see when the tires are on solid road again.
 - o If necessary (and if safety permits) pull over to the side of the road to compose yourself.



Driving while Tired

Policy

If you are tired while driving, you should always pull over and take a nap. If you do not feel tired yet, you can keep your energy levels up by eating healthy snacks, drinking plenty of fluids, and taking frequent breaks. Trying to power through exhaustion while driving can have devastating effects that are not worth it!

- STOP FREQUENTLY: During your breaks, try taking a few deep breaths to help get more oxygen
 to your brain. This will increase your mental energy, and studies show that deep breathing may also
 help:
 - Release tension in your body
 - Strengthen the lungs
 - Lower your blood pressure
- EAT A SNACK: The best energizing snacks contain a combination of carbohydrates and proteins, such as:
 - Banana slices with some peanut butter
 - Whole grain crackers dipped into hummus
 - Dried fruits and nuts
 - Yogurt and granola
 - Along with eating healthy snacks, you should be drinking plenty of water to avoid dehydration.
 Many people are unaware that one of the first symptoms of dehydration is fatigue.
- OTHER TIPS:
 - If there is a passenger in the vehicle, discussing an engaging topic may help keep your mind alert.
 - If there is no passenger and you are still sleepy after applying the above mentioned tips: pull
 over and take a nap! Even a short nap can refresh you and prepare you for another long
 drive.



Driving: Accident Reporting

Policy

When an employee is a professional driver, there is a chance that the employee may experience an accident during the course of their career. Accidents can be shocking and traumatic experiences depending on the severity of the accident. Employees may also panic during an accident if they do not know how to handle and report it. Presented in this lesson are some general guidelines that employees can follow if they are in an accident. The order in which these guidelines are implemented will depend on the severity of the accident and injuries.

Safe Work Practices

Once an accident has occurred, employees should do the following to prevent additional damage to their, and the other party's, vehicle or persons:

- Get your vehicle far off the road as possible unless doing so will increase the danger, cause additional damage or inflict injury to you or the other party.
- Ensure that the vehicle is in park before turning off the engine. Once the engine has been turned off, employees should activate their four-way emergency flashers.
- Secure the area by turning on your flashers and set out warning devices (if available). Warning devices may include:
 - 3 bidirectional triangles
 - 6 fuses
 - o 3 flares

Note: Depending on the cargo, employees may only be allowed to use the 3 bidirectional triangles.

- When setting out bidirectional triangles, employees should walk towards oncoming traffic holding an assembled triangle in front of them to ensure maximum visibility.
- It is recommended that employees wear a reflective vest or jacket when securing the area to ensure that they are visible to other drivers.

After an employee has secured the scene, they should do the following when checking for injuries and notifying authorities:

- Take a moment and check yourself for injuries. If you have no immediate injuries, take a calming breath and check the other parties for injuries.
- Give reasonable assistance to any injured person. Reasonable assistance means calling for emergency services, if they are not on scene, and keeping any injured person warm and dry.
- Do NOT move an injured person unless they are in immediate danger or there is a chance of additional injury.
- When contacting law enforcement, employees should provide the following information:



- The exact location of the accident using mile markers or landmarks if necessary.
- The number of injured people and how severe their injuries are.
- The extent of vehicle and property damage.
- Your contact information in the event that they need to contact you for additional details.
- Do NOT leave the scene to contact law enforcement. Leaving the scene is against the law.
- After notifying the proper authorities, employees should call their company and notify them of the accident. Employees should follow their company's accident procedures.

NOTE: Some states require that employees not leave the scene until all required paperwork has been completed.

When documenting an accident, employees should do the following:

- Use provided forms and complete as much information as possible. Information may include the following:
 - Witness information
 - Investigating officer information
 - Vehicle information (for all parties involved)
 - Injuries (both yours and the other party's)
 - Contact information for all involved persons
 - Sketches or drawings of the scene
- Only write down the facts of the accident. Do NOT place blame or write down your emotions.
- Take pictures of the scene with either a digital, film, or work-only cell phone camera. When taking
 pictures, employees should include different angles of the road, landmarks, and license plates
 (including those of witness vehicles).
- Take pictures of your injuries (if applicable).
- Collect witness statements.
- Turn in all required reports as soon as possible to all required departments and authorities.



Driving: Avoiding Accidents

Policy

Driving has and will always be a risky task. While professional drivers cannot control the actions of others on the road, they can control their own actions. Every driver should do their part to help minimize the chances of an accident. By following the guidelines presented in this lesson, professional drivers can limit the number of an accidents that occur on the road.

Safe Work Practices

Professional drivers should get plenty of rest before driving; this includes drivers of passenger vehicles. Driving while fatigued is nearly as bad as driving while under the influence of drugs or alcohol. To help avoid driving while tired, professional drivers should do the following:

- Get between 7-8 hours of sleep.
- If you are a making a long trip and start to feel tired, pull off the road at a safe area and take a nap or stop for the evening.
- Do NOT exceed your permitted driving hours.

Professional drivers should plan their routes. Whether you are driving a commercial or passenger vehicle, it is important to know where you are going and how to get there. When planning your trip, employees should do the following:

- Call your dispatcher or the customer for directions.
 - Your dispatcher will be the best help, but truckers may talk to someone in the shipping or receiving department as they are more familiar with the docking area.
- Get a road map and ensure that you use it. A Global Positioning System (GPS) can be great a tool, but it can fail or give wrong directions if it hasn't been updated with the latest information.
- Ensure that your GPS is updated.
- Input the address before you leave.
- Preplan your stops to help you with your driving and break times.
- If possible, check the traffic conditions of your destination prior to leaving. Try to plan your arrival for low traffic periods.

Due to how fast weather can change, professional drivers should be prepared for any weather condition on the road. To help plan and adjust for changes in the weather, employees should do the following:

- Inspect and change out windshield wipers before leaving.
- Check the weather forecast.
- Ensure that you have snow chains if you are going to an area known for snow.
- Slow down in wet or icy conditions.
- Pull over if conditions are too severe for driving.



Professional drivers should minimize how many lane changes that they do. To help minimize lane changes, professional drivers should do the following:

- Pick a lane and stay in it for as long as possible.
- When driving on a road with more than two lanes, avoid merging vehicles by staying in the 2nd lane
 from the right. This leaves the far right lane open for vehicles to enter the freeway.
- Watch vehicles that are merging onto the freeway.
- If you do need to change lanes, check your mirrors and be aware of your blind spots.
- Only change lanes when it safe to do so.

Speed is one of the biggest contributors to accidents. Professional drivers should do the following when driving:

- Do NOT exceed posted speed limits.
- Adjust your speed to the length and weight of your vehicle.
- Slow down in wet or icy conditions.
- Slow down in construction zones.

The risk of driving has increased with the multiple distractions that drivers experience these days. Distractions are a big contributor to accidents. To help minimize distractions, employees should do the following:

- Do NOT text, talk, watch videos, or check email on a cell phone, laptop, etc. All portable electric devices should be put in a safe place before leaving. A text or phone call can wait until you are in a safe place and not driving.
- Set up your radio before leaving.
- Do NOT eat or drink while driving.
- Do NOT apply cosmetics while driving.
- Keep radio talks short and to the point. Radios should be kept as close as possible to minimize reaching.
- Do NOT reach for items while driving.



Driving: Backing into Docks

Policy

Backing trailers into docking areas is one of the trickiest parts of being a CMV driver. There are a variety of challenges that a driver could be exposed to when backing into a dock. Drivers should maintain communications with everyone in the docking area and back slowly into the dock. Backing into a dock is not a race and doing things slowly and safely will help minimize accidents that occur in docking areas.

Safe Work Practices

Before attempting to back into a dock, drivers should get out of their vehicle and do the following:

- Use three points of contact when exiting the truck.
- Inspect the docking area for people, other trucks, obstacles or obstructions, lighting conditions, and anything the could act as, or get in the way of, your blind spot.
- Inform people who are working in the area that you are going to be backing up in the next few minutes and to avoid walking in known blind spots.
- Ask if obstacles can be removed from the loading area (wooden pallets, parked forklifts, etc.)
- If working in colder climates, drivers should check to see if there is ice or snow in the docking area. Employees should use extreme caution when backing over ice or snow patches.

When backing into a dock, drivers should do the following:

- Eliminate distractions in the cab.
- Roll down both windows to help with hearing.
- Maintain communication with loading staff.
- Obey all red and green lights that are used on the dock (if applicable).
- Listen for any alarms and instructions.
- Alert others that you are backing up by sounding your horn.
- Remain calm. Do NOT worry about the time that is takes to back into a dock.
- Back up slowly. Do NOT rush backing.
- Use a spotter when it is safe to do so, preferably a spotter who has experience with trailers. Do
 NOT rely solely on a spotter. It is recommended that drivers get out of their trucks and check on the
 trailer themselves.
- Watch both sides of your trailer when backing up.
- Use all mirrors on your truck. If a dock has mirrors located on or around the dock, use those mirrors in addition to your truck mirrors to help track the trailer's progress and pedestrians.
- If you find that you are having trouble with your mirrors, lean out your window and take a look around. Leaning out of the window should only be done when it is safe to do so.
- Make small adjustments.



- Get out and check adjustments as needed.
- When possible, employees should avoid sharp turns.
- Pull out and straighten out as many times as necessary.

When drivers are ready to leave, they should do the following:

- Get out and walk around the vehicle to ensure that no one is in or around the trailer. If you are
 unsure about the location of someone, ask others in the area. Ensure that all loaders are off of the
 trailer or dock leveler before pulling away from the dock.
- Wait for the light to turn green before pulling away (if applicable).
- Sound the horn to ensure that everyone is aware that you are going to be moving.
- Watch the sides of the trailer as you pull out.
- Keep an eye on both pedestrian and vehicle traffic.
- Pull away slowly.



Driving: Car Accident

Policy

Getting into a car accident is a scary experience, this is can be even worse while driving a company vehicle. The first step is not to panic, take a deep breath and follow the instructions below if you are able to do so.

Safe Work Practices

If you are involved in a car accident, the following steps should be taken:

- STOP! Not stopping could result in a hit and run charge.
- DO NOT admit fault, regardless if at fault or not.
- Take pictures of any damage.
- Remove vehicle from traffic if possible.
- Notify your employer or supervisor of the accident.
- Notify law enforcement immediately.
- Fill out the appropriate paperwork required by your state, insurance, and company.
- If you injure or kill an animal the following steps should be taken:
 - Pull over to the side of the road.
 - Try and find the owner, if you can't find them call the humane society or law enforcement.
 - Do not try to remove injured animal.
 - Never leave an injured animal to die.
- If you hit a parked vehicle or damage property, the following steps should be taken:
 - Try and find the owner of car or damaged property.
 - If you can't find the owner leave your name and address (company name and address too) in or on the vehicle.
 - Report the accident to law enforcement immediately.



Driving: Distracted Driving

Policy

Distracted driving is dangerous to both employees and the public. Drivers have enough to focus on when driving that distractions such as cell phones, paperwork, and eating can wait until the driver is in a safe place to take care of those obligations. Employees should adhere to their company's driving policies when operating a commercial vehicle or company-owned passenger vehicle. Employees are responsible for adhering to all local and federal motor laws.

Safe Work Practices

NOTE: Employees should adhere to their company's cell phone and other portable communication device policies when driving commercial vehicles or company-owned passenger vehicles. Employees should adhere to all local and federal laws regarding cell phone use.

To help avoid distractions while driving, employees should do the following:

- Take care of any adjustments (mirrors, air conditioning, seats, radios, etc.) before leaving the parking area or at roadside stops.
 - Employees with communication radios should ensure that their radio is in a place that is easy to reach. Radio talk should be kept as short as possible.
- Ensure that addresses and destinations have been put into GPS systems prior to driving.
- Read and fill out all paperwork before driving. Paperwork can wait until you are off the road.
- Create a voice message on cell phones that states that you are currently driving and will call back when it is safe to do so.
- Do NOT text, talk, check social media, watch videos, or check email on your cell phone while driving. Cell phones should be put in a safe place before getting on the road. Text, calls, and emails can wait until you are off the road.
- When possible, do NOT eat or drink while driving. If you are hungry, pull off the road and go inside to eat or eat in your vehicle while parked in a parking area. If you have no other option other than to eat or drink while driving, only drink fluids that come with a lid from which you can drink (coffee, soup, etc.) and avoid messy foods (tacos, hamburgers, chili, etc.).



Driving: Over-The-Road Truck Driving

Policy

Professional drivers help keep the economy going by transporting goods; however, employees should remember that they are responsible for their own safety and the safety of the public. By following the guideline presented in this lesson, professional drivers can help contribute to the minimization of accidents that occur on the road.

Safe Work Practices

Fatigue can be dangerous when an employee is driving on the road. Fatigue can contribute to both accidents and health problems. Some employees may not be aware of the signs of fatigue. Signs of fatigue include:

- Rubbing eyelids
- Yawning or blinking
- Heavy eyelids
- Head nodding or dropping

When an employee experiences the signs of fatigue or begins feeling tired, they should pull off the road when it is safe to do so. After pulling off, employees should either take a short break or stop for the evening and get a full seven to eight hours of sleep. Employees should ensure that their driving hours are in accordance with the Hours of Service, as regulated by the Federal Motor Carrier Safety Administration (FMCSA), to ensure that they are getting enough rest to drive safely.

Weather plays a role in how drivers operate. Employees should do the following when encountering bad weather:

- Keep substantial space between your truck and the vehicle in front of you.
- Do NOT speed.
- Slow down in wet or icy conditions. Slowing down can help prevent rollovers, jackknifes, and collisions.
- Use tire chains when driving on icy or snowy roads.
- To aid against water condensation build up, employees should keep their fuel tank full during the colder months of the year.

While driving, employees should do the following:

- Be aware of the actions of other drivers on the road.
- Signal early when approaching an intersection.
- Slow down long before making a complete stop.
- Keep lane changes to a minimum.



- Check your mirrors every 7 or 8 seconds to ensure that no one has entered your blind spot.
- If you must drive at a reduced speed due to a heavy load or bad weather, use your flashers.
- Do NOT idle for more than 5 minutes as this can expose you to fuel fumes and waste fuel.
- If idling is necessary, employees should keep their windows closed.
- Do NOT tailgate.
- Take all required breaks. Take a break if you are feeling tired or fatigued.
- Wear loose-fitting clothing to avoid cutting off circulation.

Due to the locations of some deliveries, pick-ups, or rest stops, employees should always exercise caution when exiting their trucks. To help in the prevention of robberies or bodily harm, employees should do the following:

- Call ahead to your destination and ask about the area.
- Be aware of your surroundings at all times.
- Avoid parking in dark areas.
- Park in areas that are well-lit and in areas with other professional drivers.
- Keep doors locked when you have to move away from your vehicle.
- Do NOT walk alone at night.
- Avoid carrying large amounts of cash.



Driving: Parking Lot Accidents

Policy

Parking lot accidents are just one of the many types of accidents that are associated with driving. Parking lot accidents are avoidable, but when they occur employees should remain calm and follow their company's accident procedures. By following the guidelines presented in this lesson, employees can help minimize their chances of a parking lot accident.

Safe Work Practices

Employees should follow their company's accident procedures when an accident occurs. When a car accident occurs in a parking lot, employees should do the following:

- Do NOT leave the scene if you are the one responsible for the accident. Leaving the scene can be considered a hit and run and could result in a fine or jail time.
- Stop and put the vehicle in park. Vehicles should not be moved unless there is potential for additional injuries or accidents.
- Remain calm.
- Check for injuries. If someone is injured, call 9-1-1.
- Call local law enforcement.
 - Note: Depending on the severity of the accident, law enforcement may not come out to investigate as the parking lot in question may be considered private property. Employees should be aware that some states may require that an incident be reported if the damage exceeds a certain dollar amount.
- Gather and exchange information. Information should include:
 - Name of the driver
 - Name of the vehicle owner (if it is different than the driver)
 - Name of any passengers (if applicable)
 - Vehicle make, model, license plate number, and if applicable, vehicle number
 - Insurance information which includes the company name, policy number, and phone number to call for claims
 - Contact information
 - Contact information of any witnesses (if applicable)
- Use your designated work phone or digital camera to take pictures. Pictures should include:
 - Vehicle damage
 - o Broken glass
 - Skid marks
 - Property damage
- Call your company and notify them of the accident. Follow any instructions that your company tells you.



• Fill out any required paperwork and turn it in as soon as possible.

To help minimize the chances of a parking lot accident, employees should do the following:

- Drive slowly.
- Limit or eliminate distractions.
- Use your turn signals to indicate your actions to other drivers.
- Watch the actions of other drivers and pedestrians.
- Park in spaces that are further away from the building or large crowds of vehicles.
- When possible, pick spaces where you have the ability to pull forward to avoid having to back out of a space later.
- If you can't pull forward, back into a space.
- Ensure that there is enough room between your vehicle and any other parked vehicles before parking. For bigger vehicles like trucks, it is recommended that drivers get out and look.
- Try to park in the center of the space.
- Exit your vehicle when it is safe to do so.
 - For bigger vehicles like trucks, employees should use three points of contact when exiting the vehicle.
- Check traffic conditions before pulling out or backing up.
- Check for pedestrians before pulling out or backing up.



Driving: Railroad Crossings

Policy

Drivers should remember that railroad crossings are dangerous. These crossings should always be treated as if a train were coming. Drivers should not attempt to race trains as trains do not have the same stopping ability as cars. Accidents at railroad crossings can be avoided so long as every driver does their part and respects the train's right-of-way.

Safe Work Practices

When crossing a railroad track, drivers should to the following:

- Always approach the crossing as if a train were coming. It is recommended that drivers slow down when approaching a crossing.
- Do NOT attempt to race a train.
- Do NOT put yourself in a position where there is a chance of your vehicle becoming trapped on the tracks.
- Depending on the vehicle, drivers should stop between 15-50 feet from the crossing.
- Listen for sounds of a train approaching.
 - Note: Due to noise ordinances, it is not always possible for drivers to hear trains approaching, so drivers should always conduct visual assessments before crossing the tracks.
- If it is a passive crossing, drivers should look left, right, and left again before crossing.
- Obey all signs when approaching a railroad crossing.
- Do NOT try to beat the gates. Drivers should always stop when gates are lowering into position.
- Wait for the gates to lift completely back into their original positions and for the lights to stop flashing before proceeding across the track.
 - Note: If there are two or more tracks, driver should look left, right, and left again before
 crossing as the first train could hide any other train that is approaching.

If a driver's vehicle gets trapped on the tracks, drivers should do the following:

- Exit the vehicle and get clear of the tracks.
- Do NOT reenter the vehicle for any reason.
- Call 9-1-1 or the local police department. Give them your location. Locations can be found on the warning signs at crossings.
- Call the emergency contact number that is listed on the warning signs.



Dump Truck Safety

Policy

Operators of dump trucks are responsible for following all of the safe work practices necessary for avoiding accidents, to keep themselves and others safe. Knowing the hazards involved, performing preoperation inspections, and following the safety guidelines are the steps that can be taken to ensure safe dump truck operation.

- Dump truck operators should wear a reflective, high visibility vest, protective footwear, and a hard hat in areas where required.
- Do not back up the truck unless you have surveyed the area and have a spotter.
- Operators should have a spotter or backer when reversing or dumping a load, and the spotter and operator should always be clear on the meaning of hand signals.
- All personnel should be clear of an area before dumping.
- Do not reverse a dump truck faster than walking speed.
- When raising the dump truck bed:
 - Always make sure the ground is level before dumping.
 - Make sure there are no overhead obstacles, like trees or electrical lines.
 - Drive slowly and do not make sudden turns with a raised load.
- Always block a raised dump truck bed with a prop specifically intended for this purpose before working beneath it. Props must be used according to the manufacturer's instructions.



Earthquakes

Policy

To survive an earthquake and reduce its health impact requires preparedness, planning and practices. Having emergency supplies, knowing what to do during and after an earthquake may save lives.

Safe Work Practices

BEFORE AN EARTHQUAKE

- Know where the first aid kits are and make sure they have all of the needed supplies.
- Know where the fire extinguishers are located and that they are operating properly.
- Know where to shut off utilities if you are designated to do so.
- Know your company's Emergency Escape Plan and know where it is posted.
- If you work in an area that has hazardous materials or other dangers, you need to leave that area during an earthquake.
- Know the location of your Emergency Staging Area and have regular earthquake drills.
- Make sure shelving, heavy objects on walls, signs, etc. are secured using earthquake approved methods.

DURING AN EARTHQUAKE

- Drop, Cover and Hold If you are not in a hazardous area, find a table, desk or other piece of equipment, cover your head and hold onto a table, desk or equipment leg.
- Move into a hallway or get against an inside wall, staying clear of windows, heavy objects that may fall over and any other furniture pieces that are free standing.
- If you are in a hazardous materials area, leave the area. If you need to leave the building, watch for falling debris.
- If you are outside, get into an open area away from buildings, power lines and anything else that may fall.

AFTER AN EARTHQUAKE

- If you are inside a building, exit the building, being careful of falling debris and debris on the ground.
- Go to the Emergency Staging Area. STAY THERE! You need to wait for your supervisor or emergency personnel to tell you that it is safe to leave.
- A head count or roll call needs to be taken to make sure no one is missing.
- Do not tie up telephone lines. Use the telephone for emergencies only.
- Utilities should be shut off by qualified employees only.
- If there are injuries, only trained personnel should attempt first aid and rescue.
- Wait for a member of your company who is in charge to tell you when you can either go home or go back into the building.



Earthquakes: Aftershocks

Policy

Aftershocks are themselves earthquakes, but they are more accurately described as the lower-magnitude or lower-intensity tremors that follow the principal earthquake or main shock (the largest earthquake in a sequence of earthquakes).

Safe Work Practices

After an earthquake, the disaster may continue. Expect and prepare for the potential aftershocks, landslides or even a tsunami if you live on a coast. Immediately after you should:

- If away from home, return only when authorities say it is safe to do so.
- Check yourself for injuries and get first aid, if necessary, before helping injured or trapped persons
- Each time you feel an aftershock, DROP, COVER, and HOLD ON.
- Aftershocks frequently occur minutes, days, weeks, and even months following an earthquake.
- Look for and extinguish small fires. Fire is the most common hazard after an earthquake.
- Be careful when driving after an earthquake and anticipate traffic light outages.
- Stay out of damaged buildings.
- Use extreme caution and examine walls, floors, doors, staircases, and windows to check for damage.
- Watch out for fallen power lines or broken gas lines and report them to the utility company immediately.
- If you smell natural or propane gas or hear a hissing noise, leave immediately and call the fire department.
- Open closet and cabinet doors carefully as contents may have shifted.
- Do NOT use candles or open flames as a source of light. If power is out, use a flashlight and tune into a radio for more information.
- If you are trapped by debris, tap on a pipe or wall so rescuers can locate you. Shouting can cause you to inhale dangerous amounts of dust.



Eating and Drinking in the Workplace

Policy

Eating and drinking in the workplace can be hazardous to your health. Taking the time to note what is going on around the area where you eat and drink could be essential to your health.

- Food and beverages should not be stored or consumed in a toilet room or in an area where it may be contaminated by any toxic material.
- Sprays such as cleaners, paints, pesticides or other types of chemicals can and will contaminate vour food or drink.
- Eating and drinking is prohibited in areas that are used to store or use any material that is toxic.
- OSHA prohibits the consumption of food and drink in areas in which work involving exposure or
 potential exposure to blood or other potentially infectious material exists, or where the potential for
 contamination of work surfaces exists.
- Eating, drinking, smoking, applying cosmetics or lip balm and handling contact lenses is prohibited in work areas where there is a reasonable likelihood for occupational exposure. (Exposure means that the hazardous material will contaminate these items.)
- Food and drink should not be kept in refrigerators, freezers, shelves, cabinets or on countertops or bench-tops where blood or other potentially infectious materials are present.
- Desk tops can be unhygienic places. Papers that have been handled by many hands, inks, dust and other types of debris can contaminate your food.



Electrical Arc Flash

Policy

Although arc flashes and the resulting arc blasts can be devastating, there are many things you can do to reduce your risk of danger. As a professional, you must use critical thinking to assess the hazards involved when working on any electrical circuit, and act accordingly.

- The best thing you can do to protect yourself is to avoid energized circuits, if possible.
- Along with all of your standard personal protective equipment, you must wear clothing and an
 electrical hood with an arc rating that is appropriate for the work that you are doing. It is important to
 note that the flying shrapnel will not be in its solid form, but instead will have turned into molten
 droplets of metal under the intense heat.
 - The most important thing that arc rated clothing will do is resist catching fire when coming into contact with the molten metal. Without the flame resistance, your clothing will ignite.
 - The second thing that arc rated clothing will do is insulate you against the heat to decrease the severity of any burns you might get. Standard flame resistant clothing will not do this.
- Install precautionary equipment such as insulation, guardrails, and barricades.
- Use caution when working near any energized line.
- Perform maintenance regularly to prevent deterioration of the lines.



Electrical Substations

Policy

The guidelines established are for the protection of employees that are working in and around substations. Following the established guidelines and employees being aware of their surroundings will help to ensure a safe work environment.

- Signs will be displayed to warn unqualified personnel to avoid area.
- Entrances to unattended rooms should remain locked.
- The job briefing should cover such additional subjects as:
 - The location of energized equipment.
 - The limits of any de-energized work area.
- Install barriers when guards are removed.
- Precaution should be taken to prevent accidental operation of relays due to:
 - Jarring
 - Vibration
 - Improper wiring
- The guarding of energized parts should be maintained during operation and maintenance functions except during fuse replacement.
- To prevent unqualified personnel from entering the rooms and spaces will be enclosed with one of the following:
 - Fences
 - Screen
 - Partitions
 - Walls



Electrical: Preventing Accidents

Policy

Human error, poor maintenance, improper equipment design and lack of training add up to disaster when it comes to electricity. To protect workers against the hazards of electricity, they need to know the basic facts about the causes of shock and death.

- Wear rubber gloves and boots when working near water.
- Use rubber mats to stand on.
- Use insulated tools.
- Use rubber sheets which can be used to cover exposed metal.
- Treat every electric wire as if it were a live wire.
- Inspect equipment and extension cords before each use.
- Faulty electrical equipment should be taken out of service for repair.
- Do not use tools or electrical cords that have bent or missing prongs.
- Make sure your tool is grounded if there isn't three prongs on the plug or if the receptacle doesn't have three openings.
- Turn off the power and report the smell of hot or burning plastic, smoke, sparks or flickering.
- Stop using a tool or appliance if a slight shock or tingling is felt.
- Never disconnect an electrical plug by pulling on the cord.
- Make sure the circuit is turned off and locked out at the circuit breaker or fuse box when working on an electric circuit. Only trained personnel should work on circuits.
- Those who regularly work on or around energized electrical equipment should be trained in emergency response and CPR.



Electricity Safety: Low Voltage

Policy

Low voltage electrical work does not equal low danger. Employees who work with low voltage systems must to all they can to prevent accidents from happening.

- Wear all the required personal protective equipment for electrical jobs.
- Only work on de-energized systems, if possible.
- Make sure all equipment is grounded.
- Only use tools for their intended purpose.
- Do not do electrical work in wet conditions.



Electricity: A Basic Understanding

Policy

Electricity can burn, shock or even kill you, depending on the strength of the shock. If you or a coworker is shocked, muscles can contract violently, causing broken bones, serious falls or other accidents and injuries.

- Know your equipment. Read the manufacturer's literature BEFORE you try it out.
- Unplug machinery and appliances before cleaning, inspecting, repairing or removing anything from them.
- Keep electrical equipment and work areas clean. Oil, dust, waste and water can be fire hazards around electricity.
- Keep access to panels and junction boxes clear. Do not block an electrical panel.
- Move flammable materials away from electric heat sources and lights.
- Know the location of fuses and circuit breakers.
- If you are not trained to work in high voltage areas, do not enter them, even in an emergency.
- Make sure all electrical equipment is properly grounded. Check all extensions cords to make sure that the cord is a three (3)-prong cord.
- Plug power tools into grounded outlets installed with ground fault interrupters (GFI).
- Check with your local utility companies before you dig or work near suspended power lines. A "live" line is very dangerous.
- Always treat every electrical plug or box as being "live". Be wrong on the safe side.
- Use "C" rated extinguishers for electrical fires. NEVER use water.
- Use a tool or a piece of equipment only for its intended purpose.
- Never overload the capacity of the equipment.



Electricity: High Voltage Lines

Policy

Power lines are everywhere, and with them comes the danger of electrocution. Electricity can jump or arc from a power line to a person who gets too close, so you don't even need to be in actual physical contact with a power line to be in danger. Therefore, it is important to be cautious when you are working near power lines. To stay safe, keep these tips in mind.

Safe Work Practices

- Always carry ladders horizontally
- Equipment drivers should use a spotter so they don't run into power lines
- Try not to perform maintenance on vehicles around power lines
- Try not to park under high voltage lines because vehicles can collect induced voltage
- Follow the signs on your equipment that warn against using the equipment within certain distances

Do not climb towers

- Never touch a fallen wire
- Stay away from towers and lines during extreme windstorms, thunderstorms, and other extreme conditions
- Treat every power line as if the power is on, even if you think it has been shut off
- Stay away from trees that have fallen on power lines
- If you cause a tree to fall on power lines, get away from it; do not try to retrieve your equipment



Electricity: Working Near High Voltage Power Lines

Policy

Doing any kind of work near high voltage power lines has several hazards that come with it. To avoid these hazards, inspect your worksite first and remember to practice the following safety tips.

- Electrical Hazards: Working at heights increases possible contact with electrical lines.
- If you must work near electrical lines, try to get the lines shut off for the period of time you need to work in the area
- Overturning: If the bucket or platform is loaded beyond capacity or if the lift is parked on an incline that is too steep, then the boom lift could fall over.
- Always follow the load capacity warnings from the warning stickers or the operators manual.
- Remember to take into account the weight of the people, tools, and other equipment when you use a boom lift
- Falling: Work at heights always brings with it the dangers of falling
- Always wear the proper fall protection
- Pinch Points: There are many pinch points in a boom lift, including the hinges as the boom extends or retracts
- Be aware of your surroundings
- Avoid working too near pinch points
- Be sure all safety guards and devices are in place before you use the boom lift
- Falling Objects: There is always the risk of tools or other objects being accidently dropped from the boom lift.
- Always wear a hard hat
- Do not walk under the bucket or platform
- Set up barriers or warning tape to keep bystanders at a safe distance



Electricity: Working Safely

Policy

Electricity is essential to the workplace and everyday living. When used improperly, electricity can injure or kill. Taking proper precautions can save lives and lessen injuries.

Safe Work Practices

Your actions can protect yourself and your coworkers by:

- Reading and following instructions before handling anything electrical.
- Inserting plugs only in receptacle outlets with the same slot or blade pattern. Don't force or alter a plug by bending, twisting or removing blades to make it fit into a receptacle outlet.
- Never touch electrical equipment or light switches with wet hands.
- Firmly gripping the plug, not the cord, when disconnecting equipment. Pulling on the cord can damage the cord, plug or receptacle outlet and result in a shock or fire.
- Unplugging equipment or appliances when not in use as electrical current is still present even when in the "off" position.
- Recognizing signs of overloaded circuits. Flickering or dimming lights, blown fuses, warm wall
 plates or extension cords and tripped circuit breakers are signs of overloaded circuits.



Electrostatic Discharge (ESD)

Policy

Static electricity — more properly called electrostatic charge — results when an electric charge (voltage) builds up in the absence of a circuit that allows current to flow. Your own body is frequently the carrier of static charge, which can be created by a variety of causes. ESD — Electrostatic Discharge - refers to momentary unwanted currents that may cause damage to components and equipment.

- Removing or preventing a buildup of static charge can be as simple as opening a window or using a humidifier to increase the moisture content of the air, making the atmosphere more conductive. Air ionizers can perform the same task.
- Many semiconductor devices used in electronics are particularly sensitive to static discharge.
 Conductive antistatic bags are commonly used to protect such components. People who work on circuits that contain these devices often ground themselves with a conductive antistatic strap.
- Items that are particularly sensitive to static discharge may be treated with the application of an
 anti-static agent, which adds a conducting surface layer that ensures any excess charge is evenly
 distributed. Fabric softeners and dryer sheets used in washing machines and clothes dryers are an
 example of an antistatic agent used to prevent and remove static cling.
- In industrial settings such as paint or flour plants as well as in hospitals, antistatic safety boots are sometimes used to prevent a buildup of static charge due to contact with the floor. These shoes have soles with good conductivity. Anti-static shoes should not be confused with insulating shoes, which provide exactly the opposite benefit — some protection against serious electric shocks from the mains voltage.
- In some industries there are ESD workstations where there are different grounding agents in the workstation.



Emergency Action Plan

Policy

Emergencies and disasters can strike at anytime. You are responsible for your own safety. The best way to protect yourself is to become familiar with your workplace emergency action plan and to be prepared for any emergency before it takes place.

- Know your escape route.
- Know your emergency assignment, if you have been given one.
- Know your meeting place, and who to report to for check-in.
- Know how to report emergencies.
- Know the name of the employee or supervisor you can contact for further explanation of the plan if you have any questions.



Emergency Fire Escape Rope Ladder

Policy

Emergency fire escape rope ladders are important pieces of safety equipment that allows for the emergency evacuation of buildings where no other means of egress are possible. These ladders come in many different styles, materials, and lengths so the choice of ladder is very important. It is necessary to have the appropriate style of ladder for the height of the window and the width of the egress and sill. Employees who use the inappropriate emergency fire escape rope ladders, or use the correct ladders improperly, could potentially be exposed to harm. Following the safe work practices presented in this lesson will help ensure employee safety.

Safe Work Practices

When choosing a ladder, employees should consider the following:

- Be aware of the height of the window the ladder will be mounted to. Choose a ladder that meets the height requirement. Do NOT attempt to use a ladder that is too short.
- Be aware of the average weight of the people who would be using the ladder. Choose a ladder that
 meets the weight requirement. Do NOT attempt to use a ladder that does not meet your weight
 requirements.
- If possible, install a permanent emergency fire escape rope ladder.
- Many non-permanent ladders require a windowsill that is with certain dimensions, ensure the ladder matches your windows.
- Regularly practice the proper use of the ladder. During a fire should not be the first time you use a rope ladder.
- Ensure the storage location of all non-permanent ladders are in well-marked, highly visible, and known areas.
- Only one person should use the ladder at a time unless specifically stated by the manufacturer.
- Do NOT reuse ladders that are marked as single use.
- Do NOT attempt to save any objects while escaping. Both hands are needed to climb ladder.
- Do NOT skip rungs of the ladder while climbing.
- Do NOT jump from the ladder. Always climb completely to the ground.



Employee Safety Responsibilities

Policy

Employers have many responsibilities under the law that requires them to keep their employees safe and healthy on the job. There are written safety programs, as well as safe equipment and training that each employer must provide. In general, the employer must provide their employees with a safe and healthy workplace. But safety is not just the employer's responsibility, it is also the job of every employee.

Safe Work Practices

As an employee, it is your responsibility to:

- Keep your work area free from debris, equipment, trip hazards and spills.
- To properly dispose of hazardous substances.
- To read any Safety Data Sheets (SDS) when working with chemicals.
- Keep guards on all tools and machinery that you use.
- Report injuries and/or illnesses that occur while on the job.
- Know how to evacuate your building in case of an emergency.



Excavation Safety: Preventing Cave-ins

Policy

Excavating and trenching have many dangers, including the potential for cave-in. The type of digging you do will determine the safety precautions you will use.

Safe Work Practices

Inspect the protective system daily to be sure it is still safe. Be aware of your surroundings and recognize unsafe conditions:

- Vibrations from equipment could endanger the shoring system.
- Pools of liquid, blowing dirt, hissing sounds, vapor clouds, and/or gaseous odors may mean a utility pipe or wire was damaged.
- Wet or discolored soil is an indication of a water/sewer leak and should be treated as a potential emergency condition.



Excavation Safety: Utilities

Policy

Hopefully excavators will avoid contact with utilities if they dial 811/contact the Underground Service Alert in their area. However, if something does happen, knowing what to do will help prevent any serious consequences during excavation.

Safe Work Practices

If the excavation comes into contact with overhead or electric lines:

- Turn off the equipment ONLY if you can safely do so.
- If you are on the equipment that is in contact with the electric utilities, either stay on the equipment or jump clear of it.
 - You will get electrocuted if you touch the equipment and the ground at the same time.

If the excavation causes water or sewage lines to break:

- Evacuate immediately- trenches can fill up quickly.
- Do not close valves to prevent flooding.
- Be careful of high pressure water lines because even the slightest scratch or vibration can cause the lines to burst.
- Move carefully around trenches with wet walls.
- Avoid contact with waste water.
- Sewer gas is flammable- avoid open flames or anything that might start a fire.
- If you cut into a fiber-optic cable, do not look directly into it.



Excavation: Dust

Policy

Employees will find that they will not have to worry about dust as often when they follow the safe work practices.

- Read and understand the operator manual for all dust suppression equipment.
- Inspect all dust suppression equipment for any broken or malfunctioning parts.
- Report any found malfunctioning or broken parts to your competent person or supervisor, and do not use that specific piece of equipment.
- Before the shift begins, check the day's forecast to see what the weather conditions will be.
- Look for any signs of a high wind.
- If high winds have kicked up before the operation, use your dust suppression system to ensure that minimal or no dust will be kicked up during the operation.
- Should high winds occur during the operation, stop the operation and allow for the dust suppression equipment to be used.
- When moving loads of dirt from one place to another using a truck, ensure that the dirt has been covered to help minimize the dust.
- Storage areas of dirt should be covered to help minimize or eliminate dust.
- When using a water suppression system, the soil should only be damp, not soaking.
- Record all dust activity.
- All equipment should be hosed/cleaned off at the end of the day.



Excavation: Soil Grades

Policy

Always know what type of soil you are working with so you know how to prevent cave-ins, injuries and death. Remember to look for clues from the following guidelines, and when in doubt, assume the soil is the weakest type and treat it accordingly.

Safe Work Practices

Visual Inspections:

- Observe the soil as it is excavated to see if it is cohesive or granular
- Look for underground structures and see if the soil has been previously disturbed
- Observe the surrounding areas for water seepage
- Look around for sources of vibration that may affect the stability of the soil

Manual Inspections:

- Try to mold moist soil into threads as thin as 1/8 inch in diameter
 - If it stays together without crumbling, it's cohesive
- Crumble dry soil
 - o If it turns into individual grains or fine powder, it is granular
 - If it falls into clumps and the clumps can only be broken up with difficulty, then it can be considered uninsured
- Thumb Penetration or Penetrometers
 - Using these tests will tell you what the tsf of the soil is
- Drying Test: Moisten the soil and watch it as it dries
 - If it develops cracks as it dries, it is fissured
 - Break the soil with your hand if it doesn't create cracks; and if it is hard to break, it is cohesive



Excavations and Trenching

Policy

Plan before you start any excavations or trenching with a competent person managing all the work. Follow all OSHA requirements and make sure your trenches and excavations are safe

- Check and locate any underground utilities or other buried items. "Call Before You Dig"
- Soil conditions must be carefully evaluated to determine the protective system needed.
- Wear your hard hat at all times as well as rugged boots.
- Excavate trenching banks to their proper slope ratio.
- Where necessary, straight banks should be shored.
- Weather conditions can greatly affect sloping and shoring.
- Material stock piled nearby can increase the pressure on trench or excavation walls.
- Keep heavy equipment and materials such as pipe and timbers well away from the excavation site.
- Maintain a minimum of two feet between any materials, including the spoils pile and the edge of the trench.
- Vibrations from equipment passing by can contribute to cave-ins by loosening the soil. Any soil vibration can endanger a shoring system.
- Compaction operations cause vibration; therefore, check soil conditions before, during and after compaction.
- A competent person is to inspect shoring systems daily.
- Ladders are to be located no more than 25 feet away from any worker. Ladders must extend from the floor of the excavation to 3 feet above the top and must be secured at the top.



Excavator Safe Operation

Policy

Whether you are trenching, climbing hills, or just maneuvering around the jobsite, all aspects of excavator handling can be made safer if the included safety rules are followed.

Safe Work Practices

General Safety Rules

- Buckle the seatbelt before starting the engine.
- Scan the area to make sure that no one is in the intended path.
- Double check that the control pattern is set to your desired mode and that all levers are performing their indicated task.
- Select a route that is flat as possible when driving, and slow when going over rough terrain.
- To clean the bucket, do not strike it against the ground or another object.
- Make small and gradual changes to turn.
- Never allow riders anywhere on the excavator or bucket.
- Do not operate the excavator from anywhere other than the seat.
- Carry the bucket low to increase stability and visibility.
- Inspect the jobsite if you are unfamiliar with it to become aware of any slopes, banks, or overhead obstacles (such as power lines).
- Park the machine on a level surface with the bucket or attachment and blade lowered to the ground.
 When exiting, remember to face the machine and maintain three points of contact on the hand or foot holds at all times.

Trenching or Digging

- When trenching, make sure the excavator is level.
- Spoil piles must be dumped a sufficient distance away to prevent cave-ins.
- Do not dig near the edge of an excavation or trench
- Never dig underneath the excavator.
- Underground utilities should always be marked before digging.

Climbing or Descending Hills

- Do not drive diagonally or horizontally across slopes. When driving up a slope, the boom and arm should be extended with the bucket carried low. If the unit begins to slide, you can set the bucket down to prevent sliding.
- In very steep conditions, you can use the boom and arm to assist when moving up or down the slope. When going up, alternate extending the arm and retracting it towards you to help lift the excavator up the slope.



• When going down a hill or embankment, position the bucket with the flat surface resting on the ground to support the unit and reduce the chance of slipping.

Exiting Trucks Safely

Policy

Jumping from the cab of a truck is stressful on your ankles, knees, and lower back. Employees who routinely do this should always use three points of contact, face the cab, and follow all the necessary guidelines to protect their health and safety.

- Face the vehicle.
- Do not multitask or carry items into the cab of the vehicle.
 - If you need to put something into the vehicle, or take something out, either put it in before entering or get it after exiting.
- Use the steps and handrails provided.
- Maintain three-points of contact at all times.
 - This means that at least two hands and one foot are to be used for stabilization and support at all times during entry or exit.
 - Employees may break the three-point contact rule only after reaching the ground or the cab of the vehicle.
- Never attempt to enter or exit a moving vehicle.
- Do not rush when entering or exiting the vehicle.
- Always wear appropriate footwear for the weather conditions and work being performed.
- Avoid wearing loose, baggy, or bulky clothing if there is a possibility that it may become entangled
 in the vehicle, or interfere with the access points used for entering and exiting the vehicle.



Exposed Energized Lines

Policy

Working on or near exposed energized parts on any job site can create some serious safety hazards that can be avoided with the proper observance of safety practices. Along with safe work practices, being aware of your surroundings at all times is an important factor in a safe work environment.

- Before any work is performed you should:
 - Determine the location and condition of energized lines
 - Determine the location of equipment and associated hazards.
 - Lines or parts should be de-energized.
 - The exact voltage determined.
- Employees should position themselves out of reach or exposed to energized parts when:
 - Re-fusing circuits or equipment with a hot stick.
 - Operating switching by means of operating handle or switch sticks.
 - Installing or removing a hot line clamp connection
 - Installing or removing by hot stick simple load metering devices
 - o Emergency repairs to safeguard the general public.
 - Where a slip or shock will not bring body into contact with non-insulated parts.
- Electric lines should be treated as energized until lockout/tagout procedures have been followed.
- Two or more employees should be present when working on 600 volts or more.
- Connections should be made as follows:
 - Attach wire to de-energized part first.
 - Remove the source end first when disconnecting.
 - Loose conductors should kept away from exposed energized parts.
- Rubber gloves should only be used on equipment with 5,000 volts or less.
- Be careful when wearing jewelry, the metal is conductive.



Extension Cord Safety

Policy

Extension cords help temporarily make electricity more accessible, which also means the dangers of electricity are more accessible. It is estimated that 4,000 people at the emergency room are there because of some mishap involving electricity. Therefore, keep in mind these rules and tips.

Safe Work Practices

There are other things to remember when using extension cords:

- Just because there are enough outlets in an extension cord doesn't mean you can fill them up
- Be sure you do not exceed the current required
- Make sure cords do not dangle
- They can be tripped over and ripped out of the wall
- Don't plug one extension cord into another
- You could overload the cords or circuits and start fires or other damage
- Don't plug a three-prong into two-hole extension cord
- You could overload the cord
- If you are done using an extension cord, put it away
- This prevents tripping and keeps the extension cord in good condition
- Do not store extension cords outside
- This prevents the casing from cracking and prevents damage to the prongs
- Do not use indoor extension cords outside
- The casing for indoor extension cords are not meant for conditions outside and will wear away guicker and cause hazards
- Make sure your extension cords have enough slack
- Otherwise it will be too easy for cords to be pulled out while they are transmitting electricity, which can damage the cords, circuits or equipment
- Do not coil the cords too tightly
- This will cause the wire to bend and become weak, which will damage the extension cord
- Do not pull on the cord to disconnect it; instead, grasp the plug firmly and pull it out
- This will damage the prongs and damage the wire where it connects to the prongs
- Use extension cords for temporary situations
- Extension cords wear out quickly, and electricity is too dangerous to be harnessed with damaged equipment



Fall Protection: General Industry

Policy

Fall protection is necessary to help protect employees from injuries that may result from a fall. The only way fall protection works is if everyone plays their part in ensuring that the protection works as intended. Like construction, general industry employees may find themselves working at heights or other areas which may require the use of fall protection. By following the safe work practices provided in this lesson, employees can help minimize their chances of a fall by properly using fall protection.

Safe Work Practices

Employees should do the following when working with fall protection:

- Inspect any wearable fall protection for damage (personal fall protection systems, arrest systems, travel restraint systems, etc.).
- Report any damaged fall protection immediately to your supervisor (faded floor markings, loose guardrails, fall protection harnesses with tears, etc.).
- Store any wearable fall protection in accordance with the manufacturer's instructions.
- Do NOT bypass or modify any provided fall protection.
 - Modified fall protection should be reported to your supervisor.
- All worn fall protection equipment should be worn in accordance with the manufacturer's instructions.
 - Employees should also wear provided PPE along with the fall protection.



Fall Protection: Harness Safety

Policy

A full body harness is just one tool of fall protection. It can save an employee's life should a fall occur at, or above, six feet. However, a full body harness requires proper training, storage and maintenance to ensure an employee's safety. By following the safe work practices provided in this lesson, an employee can take an active role in preventing injuries or fatal accidents from a fall.

Safe Work Practices

Note: Only those who have been trained in fall protection should be working in areas that require fall protection.

A full body harness should be stored and maintained properly to ensure the safety of all employees: Storage and maintenance should include:

- Inspecting the harness for damage. Damage could include:
 - Fraying, cuts, or chemical damage to the belts or webbing
 - Loose rivets
 - Distorted, cracked, or broken rings
 - Snaps or latches that won't attach or "mate" together
 - Burn holes or tears in the shock-absorbing packs
 - Safety labels that are not intact
- Ensuring that all harnesses have not passed their expiration date.
- Checking to see if the harness has been modified. Any modified harness should be taken out of service.
- Ensuring that the harness can limit the free fall to a maximum of six feet.
- Checking lanyards to ensure that they will be the proper length for the job and that the deceleration device can limit the max arrest force to 1,800 pounds.
- Recording inspection dates either on a designated form or on designated areas of the harness (check the user's manual for details about writing requirements).
 - A full body harness should be visually inspected before every shift, but it is required to have an in-depth inspection at least 2 times a year.
- Ensuring the harness is stored in compliance with the manufacturer's instructions.

Once the harness has passed inspection, the next step is putting the harness on and ensuring that it is set to the proper length to ensure that the system will not only stop the employee from falling, but that they won't hit an object or the ground during their fall. This includes:

- Making sure that the D-ring is in the middle of the shoulder blades.
- Ensuring that the chest straps are in the proper position on the upper chest.



- That straps are tight against the body. They should not impede movement or be too tight as to cause pain.
- Checking straps to ensure they are properly connected or "mated".

Should a fall occur, do NOT panic. Once you have stopped falling, pull out a suspension trauma strap (if applicable) and secure it to your harness. A suspension trauma strap is used to help slow or prevent the occurrence of suspension trauma.

If a harness has stopped a fall, it should be taken out of service as the shock-absorbing pack, webbing, and other parts have been exposed to gravitational forces and have been damaged.



Fatigue Risk Management

Policy

Fatigue can put you in a terrible cycle: Fatigue diminishes the ability to cope with stressors in a healthy way, which leads to disruption of sleep, which leads to increased fatigue. When you are experiencing fatigue at work, it increases the probability of accidents because you are distracted and have trouble focusing. Therefore, to avoid accidents and take yourself out of the fatigue cycle, remember to be aware of what causes fatigue, learn to recognize the signs, and take steps to avoid or defeat fatigue.

- Make sure activities outside working hours do not inhibit your ability to carry out duties
- Always think of the risk to your own or other employees' safety and health
- Make sure you get adequate sleep and you are not in a fatigued state before starting a shift
- Eat a balanced diet
- Exercise regularly
- Deal with emotional problems instead of ignoring them
- If possible, take small breaks for rest, water, and food
- Create a healthy balance between work and personal life



Fire Extinguishers

Policy

Employees who work in any area with potential fire hazards must be trained and aware of the possible risks, and what to do in case of an actual fire. Employees must not use fire extinguishers unless they have been properly trained on how to do so correctly.

- Employees should know where all nearby fire extinguishers are located.
- Fire extinguishers must always be mounted in readily accessible locations.
- Employees should be trained on how to properly operate the fire extinguishers.
- Only the correct type of extinguisher should be used for the particular fire:
 - Class A: For ordinary combustible materials, such as wood and paper.
 - Class B: For flammable liquids and gases.
 - Class C: For energized electrical equipment.
 - Class D: For combustible metals, such as magnesium.
 - Class K: For cooking oils, grease, or animal fat.
- Halon: For sensitive electrical equipment or aircraft parts.
- Fire extinguishers should be inspected monthly by a competent employee.
- Fire extinguishers must be serviced and recharged annually.



Fire Hazards in the Workplace

Policy

Be sure to educate yourself about the different types of fire hazards in your workplace, such as heat sources and electricity, and learn and practice safe procedures when dealing with them. If you are aware of the fire hazards around your workplace and know what to do to eliminate them or keep them safe, you can prevent workplace fires.

- Keep an appropriate fire extinguisher nearby
- Turn off all nonessential electrical equipment at the end of the day
- Do not overload circuits or extension cords
- Do not use extension cords for heavy duty electrical equipment
- Keep the dust buildup to a minimum
 - Take special care with hard to reach areas where dust buildup often goes unchecked
- Take out the trash regularly
- Keep doors, hallways, stairs, and other exit routes free of obstructions
 - Be sure you are familiar with different escape routes
- For flammable and combustible materials, remember LIES:
 - Limit the amount of flammable liquids in storage
 - Isolate and store materials in approved containers stored in enclosed cabinets
 - Eliminate products you don't need by safely disposing of them
 - Separate incompatible materials (ie don't store flammables near corrosives)



Fire Hazards in the Workplace: Fuels

Policy

85% of workplace fires are caused by human error, which means that 85% of workplace fires are preventable. If you identify and properly handle and store fuels, you can help avoid workplace fires.

Safe Work Practices

Once you have identified the fuels in your workplace, record them and evaluate what you need to do for each specific one in order to prevent them from starting a fire.

- Always consult your SDS to make sure you are properly handling and storing the fuels
- Minimize the storage of combustible materials
 - Be sure they are present only in quantities needed for the operation
- Dispose of combustible waste in covered, airtight, metal containers
- Report all gas leaks immediately
- Clean up spills and leaks immediately
- Practice good housekeeping:
 - Keep work areas free of dust, lint, sawdust, scraps, and similar material
 - Keep storage and working areas free of trash
 - o Do not use gasoline or other flammable solvents to finish or clean floors
 - Keep passageways free of obstacles
 - Put items away when not in use
 - Put oily rags in a covered metal container and regularly and properly dispose of them
 - Leave time for cleanup at the end of you shift
- Store fuels away from sources that can produce sparks
 - Some fuels, such as liquids and gas, will travel on surfaces and in the air, so it may not be enough to store the fuel sources at a distance; you may need to put them in completely separate rooms
- Do not transfer fuels from one container to another by applying air pressure to the original container
 - Transferring them in this way may cause the containers to rupture and cause a serious spill
- Do not refuel gasoline-powered equipment while it is hot



Fire Hazards in the Workplace: Ignition Sources

Policy

A fire needs three elements: fuel, oxygen, and an ignition source. Therefore, if you can control one of the elements, you can prevent an unwanted fire from starting in your workplace.

- Keep ignition sources as far away from fuel as you can
 - Eliminate all nonessential ignition sources where flammable liquids are used or stored
- Keep flammable and combustible materials stored below their auto-ignite temperatures
- Use non-sparking tools when opening containers of flammable and combustible liquid
- Bond and ground your equipment to prevent static electricity discharge
- Do not use any ignition sources in areas with a flammable atmosphere
 - If an ignition source goes off in flammable atmosphere, an explosion is likely to result
- Only use equipment for the purpose it was intended
- Do NOT smoke in non-smoking areas



Fire Safety and Prevention

Policy

Fires don't usually occur with frequency or regularity in the workplace and therefore workers are not particularly concerned about them. However, fires have many causes and can happen anytime. Therefore, it is important to try to prevent fires and be ready to correctly respond to them if they do happen.

Safe Work Practices

USING A FIRE EXTINGUISHER

When using a fire extinguisher, remember PASS:

- P: Pull the locking pin
- A: Aim the fire extinguisher at the base of the fire, not the flames or smoke
- S: Squeeze the lever of the fire extinguisher to operate
- S: Sweep the fire extinguisher back and forth at the base of the fire

RESPONDING TO FIRES

- Remain calm
- Call the fire department when there is a fire
 - Do NOT wait to investigate the situation
- Use the stairs to evacuate, not the elevators
- If you get stuck in an office high off the ground, hang a sweater or shirt out of a window to alert the firemen to find your position
 - Stay as close to the floor as you can; smoke rises to the ceiling, leaving the cleaner air towards the floor
 - Use a sweater, shirt, or towel to help reduce smoke inhalation

YOUR RESPONSIBILITIES

- Be aware of potential fire hazards in the workplace, such as frayed electrical wire, and report hazardous situations to the supervisor
- Know your company's safety procedures and participate in fire drills
- Know where the emergency exits, fire alarms, and fire extinguishers are
- Know your location, address, and the nearest cross street so you can give that information to the 911 operator



Fire Safety: Stop, Drop and Roll

Policy

Fire in the workplace are usually caused by human error and can be prevented in most cases. Being aware of your surroundings and of all potential fire hazards is the responsibility of every employee. Time is of the essence when an employee catches on fire. Remembering to stop, drop and roll is essential in helping prevent or minimize fire-related injuries or death.

- If you catch on fire, remember to:
 - STOP where you are.
 - DROP to the floor.
 - ROLL around to smother the flames (as long as floor is not on fire).
- If a co-worker catches on fire, smother the flames by wrapping a blanket or rug around them. This could save them from serious burns or even death.
- Implement good housekeeping practices.
- Keep work areas free of clutter and dust.
- Keep ignition sources away from combustible materials, flammable liquids/gases.
- Change clothes if they come in contact with any flammable material.
- Loose fitting clothing should not be worn while working around potential fire hazards.
- Fire resistant clothing should be worn when possible.
- Long hair should be kept in a hairnet or hat.
- Knowledge of location and how to use fire extinguishers is essential.



Fire Sprinkler Systems

Policy

Fire sprinklers can be very useful, and employees who work in buildings with fire sprinkler systems should understand how they work in relation to the emergency action plan.

- Employees should understand that smoke alone will not trigger a fire sprinkler system.
- When a fire sprinkler system goes off, only the required amount of sprinklers will discharge.
- It is important to know what type of fire sprinkler system the building is equipped with:
 - Wet pipe system the pipes are full of water ready for activation at any moment.
 - Dry pipe system the pipes are full of compressed air and upon activation, the sprinkler heads must release the air to allow the system to be filled with water.
 - Pre-action system upon first detection of fire, the pipes fill with water. Then this turns into a
 wet pipe system in which the individual sprinkler heads must be activated to spray.
 - Deluge system triggered by a smoke detector or heat detector, but instead of requiring an additional sensor, every sprinkler head is always open and each one goes off without delay.



First Aid Kit: Where and What

Policy

First-aid is emergency care given before regular medical aid can be obtained. If and when an accident occurs, a first-aid program that meets OSHA standards and is tailored to the type and size of the workplace can make a difference between life and death.

Safe Work Practices

WORKPLACE REQUIREMENTS

Workplaces should have the following:

- At least one person with first-aid or medical training readily available in case an emergency should be in the workplace.
- First-aid equipment and supplies
- Up to date first-aid manual
- Posted phone numbers for the Police Dept., Fire Dept., Ambulance or EMS, nearest hospital and Poison Control.

KNOW WHERE THEY ARE

- Know where the first-aid kit(s) is located. First-aid kits should be easily accessible.
- Have emergency phones numbers posted for quick responses.
- Know where all fire extinguishers are located.
- Know where nearest exits are located for easy access out of the building.
- Know where the AED Automated External Defibrillator is located and how to use it. (Not required by OSHA to have, but highly recommended.)



First Aid: Basics

Policy

At work, injuries and illnesses kill more than 2 million people in the world each year. That is one death every fifteen seconds or 6,000 people a day. Safe practices can prevent many injuries, illnesses and deaths. However, once injury or sudden illness has occurred, providing effective first-aid can make the difference between life and death; rapid versus prolonged recovery and temporary versus permanent disability.

Safe Work Practices

NEVER attempt first-aid skills that exceed your training.

- Assess the Scene
- If it is not safe or at any time becomes unsafe, GET OUT!
- Observe Universal Precautions by using personal protective equipment. (Universal precautions means to wear goggles, gloves or a face mask to protect from a patient's body fluids.)
- If victim is awake and talking, identify yourself and ask if it is okay to help.
- If victim appears weak, seriously ill or injured or is unresponsive, call 9-1-1.



First Aid: Shock - What It Is & How to Treat It

Policy

If someone loses too much blood, they will go into a condition known as "shock". Our bodies can cope with a small amount of blood loss, normally around a pint, which is perfectly safe. However, if you lose too much blood, your body's cells and tissues are deprived of oxygen, which we call shock.

Safe Work Practices

The most important step in treating shock is to control bleeding. However, if the victim is already showing signs of shock, it's important to take the necessary steps to stabilize the victim until help arrives. If you are needed to treat a victim for shock, you should:

- Call 9-1-1 (Remember that 9-1-1 works differently on a wireless phone than it does from a landline.)
- Use universal precautions and wear personal protective equipment if you have it.
- Lie the person down & elevate their legs. If you suspect neck or back injuries, do not move the victim.
- Turn the victim's head to the side if neck injury is not suspected.
- Loosen any tight clothing.
- Make sure the victim is breathing. If not, begin rescue breathing.
- Keep the victim warm and comfortable.
- Do NOT give the person anything to eat or drink as this may cause them to be sick.



First Aid: What Is It

Policy

First-aid is the emergency treatment and care of the wounded or sick before professional medical services are acquired. On job sites or workplaces, first-aid is the care given by a trained person as soon as possible after an accident. The particulars of a workplace medical and first-aid program are dependent on the circumstances of each workplace and employer.

- The key to providing the best assistance in an emergency situation is making sure that all employees understand the protocol.
- Having a workplace first aid program in writing and readily available to all employees ensures that there will be a resource to reference if necessary in an emergency situation.
- Having emergency phone numbers such as the local police station and fire department, the nearest hospital or clinic, and poison control among others – in your first aid program is also valuable.



Flagger Safety

Policy

Flaggers have a very important job. Not only are they the first contact people will have with the group of workers, and therefore responsible for the first impression, but they are also responsible for protecting themselves, coworkers, and anyone else that passes by. Therefore, when you are a flagger, remember to follow these safety tips.

- Flaggers should be in place before work starts and should be the last to leave
- Flaggers will be provided with the proper hand-signaling devices
- Flaggers will be provided training per their respective duties
- Be visible
 - Do not lean or sit on a vehicle
 - Do not let your coworkers gather around you and block you from view
- Stay focused on traffic
 - Do not wear head phones or ear buds
- Look for at least one method of escape should things go wrong (such as a car not stopping)
 - Protect yourself first, then alert your coworkers
- Alert your supervisors if you need someone to take over for you
- Know what to do in emergency situations, such as car accidents
- Pedestrians will have the right of way
- Remember the following if you come across a hostile driver:
 - Do not argue with them or raise your voice
 - Be professional and civil
 - o Do not lean on their car
 - If they threaten your safety or fail to follow instructions, discreetly take down their license plate number and vehicle description and report it to your supervisor



Flammable Liquid Storage

Policy

Flammable cabinets are a necessary piece of equipment in many industries. The main cause of industrial fires is improper storage and handling of flammable liquids, so the best defense against these fires is the proper use of approved safety cans and flammable storage cabinets.

Safe Work Practices

If your facility stores less than 25 gallons of flammable liquids at any given time, they can be stored in safety cans outside of a flammable liquids storage room or storage cabinet. However, if you have more than 25 gallons of flammable liquids, you are required to store them inside flammable storage cabinets that comply with the requirements as listed under OSHA code, which includes:

- No more than 120 gallons of flammable liquids should be stored in a single storage cabinet.
- No more than 60 gallons combined of either Class I or Class II flammables should be stored in the same cabinet at any given time.
- Bottom, top, and sides of the cabinet shall be constructed with at least No. 18 gage sheet
- The flammable cabinet must be doubled walled with 1 ½ inches of airspace.
- Joints shall be riveted, welded or made tight by some equally effective means.
- Door shall have a three-point latch and be raised at least 2" above the cabinet bottom to retain spilled liquid within the cabinet.
- Cabinet shall have "FLAMMABLE—KEEP FIRE AWAY" markings or signage.



Flammable Liquids: Safe Handling

Policy

Chemicals and fuels have widespread usage in industries for a multitude of important needs, but because of their hazardous nature, special care and handling is paramount. The proper use and storage of flammable liquids must be understood, and it clearly is a critically important subject for employee training. The range of flammable liquids goes from cleaning fluids to paints and gasoline to other volatile and dangerous liquids. Knowing the rules for handling and storing flammable liquids can help prevent injury to yourself and your coworkers and can prevent your jobsite from going up in flames.

- Carefully read the manufacturer's label on the container of any flammable liquid before storing or using it.
- Practice good housekeeping in flammable liquid storage areas.
- Clean up spills immediately and then place the cleanup rags in a closed, bottom ventilated, metal container.
- Only use approved metal safety containers or the original manufacturer's container to store flammable liquids.
- Keep the containers closed when not in use; stored away from exits or passageways.
- Once the flammable liquid is in place in an adequately constructed storage room, it should be connected by a grounding wire to the room's grounding system.
- Grounding allows static electricity charges to drain off before they can build up to a sparkproducing potential.
- Use flammable liquids only where there is plenty of ventilation.
- Not all dangerous liquids give off vapors you can smell. Some vapors are poisonous as well as flammable.
- Wear the proper PPE when working with any flammable liquid.
- Be careful not to get a flammable liquid on you or your clothing.
- It could cause painful skin irritation or ignite your clothing and envelop you in flames. If you get it on you, wash it off or change your clothes as soon as you can.



Gasoline Safety

Policy

Remember the proper use and storage of gasoline to prevent accidents, and remember what to do in case accidents actually do happen. In doing so, you can prevent injury, property damage, and death.

- Only use gasoline as a fuel
- Do not use it as an accelerant, solvent, cleaning solution, or a weed or insect killer
- Keep gasoline a safe distance from any of the igniters listed above
- Have an ABC fire extinguisher nearby
- Follow the proper procedures for flammable and combustible liquids when using gasoline:
- Keep gasoline in closed containers when not actually in use
- Promptly and safely dispose of leaks or spills
- Do not store gasoline near exits



Generator Safety

Policy

Portable generators are commonly used and provide necessary power to many jobsites. They are safe to use for the most part, but can be dangerous if used incorrectly. Following company policy and these safe work practices should help to ensure employee safety, while using a portable generator.

- The generator should not be ran in an enclosed space.
- Frayed or defective extension should not be used.
- The generator should not be used in the rain or snow, use an overhang or in portable shelter if possible.
- Gasoline should not be added to a running generator and be sure, to:
 - Shut down the generator and let it cool before adding fuel or performing maintenance.
 - Store and transport fuel in approved containers.
- Appliances and tools should be plugged in directly to the generator, unless:
 - An outdoor rated extension cord with ample watts or amps in used.
- If the generator is going to sit for long periods of time it is good to periodically start it up and let it run for a few minutes.



Good Housekeeping

Policy

Good housekeeping will not only prevent accidents and injuries, but it will save space, time and materials. Keeping a clean workplace that is orderly and free of obstructions will help to get work done safely and properly.

Safe Work Practices

Good housekeeping should be a habit and should become natural to all employees. Some things that can be done to make sure things are kept clean and safe are:

- Put items such as tools, away as soon as you are done using them.
- Clean up spills, broken glass, etc. as soon as they happen and place signage, cones etc. if needed.
- Clean up your work space as you work instead of leaving it all until the end of the day.
- Clean tools as soon as you're finished using them.
- Empty trash receptacles often.
- Keep aisles clear at all times.
- Keep clutter out of the workplace.
- Close cabinet doors and drawers.
- Report any unsafe item or area to a supervisor if you are not able to fix the problem.



Grounding and Bonding

Policy

Bonding and grounding provides an electrically conductive pathway to eliminate the buildup of static electricity and allow it to safely dissipate into the ground. This can be done to containers of flammable liquids, electrical systems, or metal buildings. Without bonding and grounding, static electricity can build up and cause a dangerous situation so employees must make sure to understand it and do it properly.

Safe Work Practices

Before bonding and grounding, employees must:

- Remove all dirt, paint, or rust from points of contact because grounding and bonding must be done
 bare metal to bare metal.
- Always use specially designed and approved bonding and grounding wire assemblies provided by safety equipment retailers.
- Use grounding wire assemblies according to the manufacturer's instructions.

To ground objects, connect the object to an already-grounded object that will conduct electricity such as:

- A buried metal plate,
- A metallic underground gas piping system,
- Metal water pipes
- A grounded, metal building framework.



Hand Protection

Policy

Hand safety is a very important element to overall workplace safety. These guidelines have been established to ensure the safety of employees. Following these guidelines and safe work practices will help to ensure a safe work environment.

- Work areas should be kept clean and maintained in an orderly fashion.
- Sharp instruments should be put away properly when not in use
- Hands should be thoroughly washed with soap and warm water to eliminate bacteria.
- Be careful where you put your hands, especially when putting stuff in trash cans.
- Rings, watches, and bracelets should not be worn when working around machinery.
- Double check to make sure that all guards are in place and secure before operating machinery.
- Don't try to force the machine to work outside of its normal function.
- Guards are in place for your protection, do not reach through the guards for any reason.



Hand Tool Safety

Policy

Not following the appropriate safe work practices may lead to various injuries depending on what tool is misused. Possible injuries include abrasions, lacerations, puncture wounds, contusions, burns, or muscles sprains. Even common, non-powered hand tools must be handled and treated with caution at all times.

- Know how to safely operate any tool before using it.
- Keep all tools in good condition by using them for their intended purpose.
- Wear personal protective equipment as required.
- Inspect your tool for cracked or bent pieces, loose or missing parts, and rust or corrosion.
- Make sure that handles are not loose, cracked, or splintered.
- Tools that you strike must be intact and ground down to reduce chipping.
- Store tools in a safe place elevated work areas and ladders are not appropriate storage areas.
- All applicable guards should be in place.
- Use spark proof hand tools when working near flammable materials.
- Do not try to fix a tool that is in disrepair unless you are specifically trained.
- Use insulated hand tools when working near electrically energized equipment.
- Make sure the area that you are working in is properly lit.
- Keep the floor neat and clean tripping with a tool in your hand can be very dangerous!
- Do not try to get your coworker's attention while they are using a tool.
- If somebody tries to get your attention while you are working with a tool, stop what you are doing to talk to them.
- Use a wrist lanyard to help keep tools from falling when working at elevated locations.
- Do not modify tools in any way.
- In some situations, clamping down materials will help to keep it from shifting.



Hazard Communication and GHS

Policy

Effective Hazard Communication promotes safe use and handling of chemical substances in the workplace. It is vital that employees are active participates in company hazard communication procedures and use safe work practices to assure a safe work environment.

- Be aware of all chemicals hazards in your work area.
- Always know where to access hazard communication material.
- DO NOT handle chemicals until the SDS has been reviewed and employee is properly trained.
- Make sure there is an SDS for every chemical substance.
- Comply with SDS safe use, handling, and storage requirements.
- Inform supervisor if there is no SDS for a chemical substance or if the SDS is not up-to-date.
- DO NOT handle chemicals or containers if there is no label.
- DO NOT handle containers if you do not understand how to read labels.
- Make sure every chemical substance container is labeled.
- Make sure labels are up to date and are presented in the GHS format, which includes:
 - Signal word(s).
 - Pictogram(s).
 - Manufacturer information
 - Precautionary statements/ first aid.
 - Hazard Statement(s)
 - The product identifier or name.
- Abide by label statements and use the appropriate precautionary actions, such as use of PPE.
- Do not remove, alter, or deface labels.
- Inform supervisor if there is no label for a chemical substance or if the label is defective.



Hazard Communication: GHS Labels

Policy

It is important that workers understand and identify various chemicals throughout the workplace and know how to work with them safely. Not only does this eliminate accidents, but also gives workers a greater sense of confidence and peace of mind while working.

- DO NOT handle chemicals or containers if there is no label.
- DO NOT handle containers if you do not understand how to read labels.
- Make sure every chemical substance container is labeled.
- Make sure labels are up to date and are presented in the GHS format, which includes:
 - Signal word(s).
 - Pictogram(s).
 - Manufacturer information
 - Precautionary statements/ first aid.
 - Hazard Statement(s)
 - The product identifier or name.
- Abide by label statements and use the appropriate precautionary actions, such as use of PPE.
- Do not remove, alter, or deface labels.
- Inform supervisor if there is no label for a chemical substance or if the label is defective.



Hazard Communication: Safety Data Sheets (SDS)

Policy

It is important that workers understand and identify various chemicals throughout the workplace and know how to work with them safely. Not only does this eliminate accidents, but also gives workers a greater sense of confidence and peace of mind while working.

- DO NOT handle chemicals until the SDS has been reviewed.
- Make sure there is an SDS for every chemical substance.
- Make sure SDSs are up to date and are presented in the 16-section GHS format.
- Comply with SDS safe use, handling, and storage requirements.
- Inform supervisor if there is no SDS for a chemical substance or if the SDS is not up-to-date.



Heart Attack

Policy

The most important thing to remember when someone experiences a heart attack is that time is muscle. The moment someone starts to show symptoms of a heart attack, medical services should be contacted immediately. Paramedics can start to administer early treatment on site which can save more of the person's heart muscle, which can lead to a person having a full recovery.

Safe Work Practices

NOTE: If you are not trained or do not feel comfortable about giving aid, immediately call 911 and follow the directions given by the dispatcher until the paramedics arrive.

Whether a person is at work or doing leisure activities, they can experience a heart attack. When someone has a heart attack, it is vital to get that person help. The more time that it takes for help to arrive, the less likely it is for the heart to recover from damaged muscle tissue. A delayed response could lead to death if help does not arrive in time.

When a person sees someone showing symptoms of a heart attack, they should:

- Have someone call 911. The person who calls should provide as much information as possible to the dispatcher.
 - If the person is unsure about the symptoms, paramedics can rule out a heart attack when they arrive on scene.
- Have the person sit or lie down. Their head should be kept elevated.
- Keep the person calm.
 - Don't lie or downplay the situation. Reassure the person that help is coming and that you will stay until help arrives.
- Have the person loosen any tight clothing.
 - If they can't do it themselves, help them by loosening buttons.
- Note the time of when symptoms appeared. Give this information to the paramedics upon arrival.
- If the person has fallen unconscious and their heart has stopped, someone who is trained in CPR should start to perform CPR as quickly as possible. In some cases, CPR has helped paramedics bring a person back from cardiac arrest when the person has experienced a heart attack.

In some situations, a person may insist on driving themselves to a hospital. Do NOT allow the person to drive. If a person drives, they could cause a motor accident, leading to more people needing medical assistance. It is always quicker for paramedics to transport a person experiencing a heart attack than the person attempting to drive or have someone else drive them.



Heat Illness Prevention

Policy

A healthy body temperature is maintained by the nervous system. As the body temperature increases, the body tries to maintain its normal temperature by transferring heat. Through sweating and blood flow to the skin, our bodies cool down. A heat-related illness occurs when our bodies can no longer transfer enough heat to keep us cool.

Safe Work Practices

Most heat related health problems can be prevented or risk reduced by following a few basic procedures.

- Good ventilation of an indoor facility
- Fans, evaporative cooling or mechanical refrigeration
- Acclimatization using short exposures followed by longer periods of work in the hot environment.
- Drink plenty of water
- Take frequent shade breaks
- Stay away from caffeinated drinks when working in hot environments
- Learn to recognize the symptoms of heat-related illnesses
- Use protective equipment (Hats, cool fabrics, etc.)



Heat Illness Prevention: Acclimatization

Policy

Acclimatization may not be rushed, because the body needs time to adjust. The majority of heat-related injuries and illnesses are due to improper or absence of heat acclimation procedures, so it is important that this step is not skipped or seen as optional!

Safe Work Practices

During acclimatization:

- Employees should do the heaviest work of the day during cooler hours, if possible.
- At least two hours in the heat are required each day.

Gradually increase your intensity level a little bit each day – don't push yourself too hard too early.

- Make sure you are drinking enough water before becoming acclimated to the heat, your thirst
 reflex will not be very strong so you will have to remind yourself to drink even before you are thirsty
 (about one quart of water per hour).
- Employees who are not acclimated to the heat are required to take more frequent shade breaks than acclimated employees.



Heat Illness Prevention: High Heat

Policy

Working in the heat could be hazardous, and is especially so in weather of 95 degrees or hotter. Be sure to drink enough water, take shade breaks, and keep in communication with your supervisor or a partner so you can avoid heat illness and death for you or your coworkers.

- Drink about four 8-oz cups per hour during hot weather
 - That's how much your body loses when you sweat
 - Know where the water is located
 - o Do NOT drink too much water: "too much" is usually about 48 cups in a 24 hour period
- If possible, start work earlier in the day when it's coolest
- Try to do the heaviest jobs during the cooler hours of the morning or late afternoon when the sun is down
- Wear light colors and loose clothing to allow the body to breathe
- Get help if you are experiencing the symptoms of heat illnesses
- Rest in the shade when you need it
- If you are new, be sure someone is supervising you for the first 14 days until you are acclimatized (used to) the high heat



Heat Illness Prevention: Hydration

Policy

Water makes up about 80% of the brain and is an essential element in neurological transmissions. Poor hydration adversely affects our mental performance and learning ability.

Safe Work Practices

How much should we drink?

- The standard recommendation is at least 6-8 glasses a day.
- Drink regularly throughout the day, ensuring that plenty of additional fluid is taken in during warm weather.
- Replace electrolytes by drinking fluids that replace the electrolytes.

How does hydration work?

- The skin is the key to the body's ability to regulate its temperature (thermoregulation). Once the brain senses that there is an increase in temperature, it initiates thermoregulatory mechanisms.
- The skin is the main cooling organ. It maximizes heat loss by using radiation, convection, conduction and evaporation.
 - Radiation heat is directly lost to the atmosphere.
 - Convection heat loss is facilitated by moving air or water vapor.
 - Conduction heat loss by direct contact with a cooler body.
 - Evaporation heat is lost by turning liquid (sweat) into vapor (the skin's major heat loss mechanism).



Heat Illness Prevention: Indoor Workplace

Policy

Employees who work in high-heat areas are at risk for heat illness whether they work inside or outside. Even during the winter, employees should know the steps to prevent heat illness.

- Identify work areas where heat illness may be a concern.
- Employees must be acclimated to high temperatures before working in the heat.
 - Increase workloads gradually and allow frequent breaks during the first few weeks.
- Whenever possible, distribute the workload evenly between warm and cool areas.
 - If you can, plan to rotate with another employee for efficiency.
- Schedule heavier work tasks during the cooler parts of the day, if possible.
- Drink one quart of water per hour.
- Employees should know the symptoms of heat illness, and procedures to follow if these symptoms are spotted in themselves or another coworker.



Hot Works

Policy

When dealing with hot work, it's important to recognize, evaluate and control the hazards that are present.

- Weld only in designated areas.
- Don't weld on containers which have combustible materials or on drums, barrels or tanks until
 proper safety precautions have been taken to prevent explosions.
- Locate the nearest fire extinguisher before welding.
- Know what the substance is that's being welded and any coating on it.
- Check area around you before welding to be sure no flammable material or degreasing solvents are in the welding area.
- Keep your head away from the plume by staying back and to the side of the work.
- Don't weld in a confined space without adequate ventilation and a NIOSH-approved respirator.
- Keep a fire watch in the area during and after welding to be sure there are no smoldering materials, hot slag or live sparks which could start a fire.
- Proper PPE should be worn at all times when welding.
- Remove all fuel sources where possible.
- Provide proper fire extinguishing equipment close to the work area.
- Do not leave oxygen or acetylene hoses unattended.
- Consider where sparks will fall when doing hot work.
- Shield fuel sources to protect from ignition sources.
- Cover openings to prevent sparks from entering and being carried to unprotected fuel sources.
- Don't coil the electrode cable around your body.
- Ground both the frame of the welding equipment and metal being welded.
- Check for leaks in gas hoses using an inert gas.
- Deposit all scraps and electrode butts in proper waste container to avoid fire and toxic fumes.
- If you have any questions about your welding operation relating to health and safety, talk to your supervisor



Housekeeping for the Office

Policy

Housekeeping in the office is important to health and safety. Dust, mold, and germs can cause allergies and illness. Clutter and spills can cause slips, falls, and injuries. In addition, a clean workspace lowers stress and therefore contributes to increased productivity.

- Restrooms
 - Clean and sanitize regularly (preferably daily)
 - Do not allow paper to litter the floor
- Kitchens
 - Wipe up spills as soon as possible
 - Clean the counters, sink, and microwave
 - Clean out the refrigerator regularly
- Trash
 - Empty trash on a regular basis
- Cleaning supplies
 - Mark cleaning supplies clearly
 - Store chemicals and cleaning supplies in separate areas
 - Properly store or dispose dirty rags
- Walkways
 - Keep walkways clear of piles and other clutter Do not leave file cabinet drawers and cupboard doors open
 - o Do not let electrical and telephone cords cross walking paths
- General
 - Vacuum and dust regularly
 - Remember it's everyone's job to maintain a clean environment



Hydraulic Power Tools

Policy

Operators of hydraulic power tools must observe many of the same safety guidelines that they would when using a regular power tool. General safety guidelines must be used in addition to guidelines specific for hydraulic power tools AND all safety rules outlined by the manufacturer.

- Most power tools require the following personal protective equipment:
 - Safety glasses
 - A hard hat
 - Safety gloves
 - Protective boots
- Before you start, you should inspect the tool for any defects such as:
- At all times, the fluid inside of a hydraulic power tool must be:
 - Approved fire-resistant fluid.
 - Able to retain its operating characteristics at the most extreme temperature to which it will be exposed.
 - At the recommended operating pressure.
- Considerations when choosing a hydraulic hose include:
 - o Inside diameter, outside diameter, and length
 - Recommended internal liquid temperature and external working temperature
 - Flexibility
 - Connectors



Industrial Injuries

Policy

Industrial injuries are something that nobody wants to happen. However, when they do, it is important to remember what to do so the incident does not become worse. This includes administering the proper first aid and making sure serious injuries or illnesses are properly reported, and knowing how to investigate the accident so it does not happen again in the future.

- Know where the first aid kit is located.
- Know where eye wash stations, fire extinguishers, and other safety features around the workplace are located
- Know how to properly administer first aid
 - Be sure that the person administering first aid knows what they are doing so they don't make the injury worse.
- Once the emergency of the injury, illness, or death has been dealt with, you will want to make sure
 the accident never happens again. An accident investigation should stay neutral and not be used to
 blame employers or employees.
- Serious Injuries or Illnesses are required to be reported to OSHA
- You need to report a serious injury, illness, or death of an employee immediately. "Immediately" means:
 - As soon as practically possible and
 - No longer than 8 hours after you found out about it
- You need to report the serious injury, illness, or death of an employee by telephone to the nearest District Office of the Division of Occupational Safety and Health.
- Be sure to know which office that is and have their number on hand.



Jackhammer Safety

Policy

Jackhammers are hazardous in many ways, more than just accidentally hitting your toe with the tip. In addition, using a jackhammer can lead to problems such as occupational vibration syndrome, and dust contamination. Remember the following so you can be prepared to protect yourself while using a jackhammer.

- Be aware of your surroundings and work accordingly
 - Many times jackhammers are used in areas with vehicular traffic; be sure you set up the proper warning devices, such as cones or flags, and wear the required visibility clothing
 - Make sure the work area is barricaded from any unauthorized personnel
- Lift the jackhammer with your legs, not your back
- Keep the cords and hoses over your shoulder to make sure the jackhammer tip does not accidentally cut into them
 - Never carry the jackhammer by the cords or hoses
- Hold the jackhammer at an angle so the tip doesn't get stuck
- Make sure you're not in an awkward stance while using the jackhammer
- Completely disconnect the jackhammer and relieve any pressure in the hoses whenever you aren't using it or when you need to perform maintenance so it does not accidentally go off
 - The tips can get very hot, so be careful when handling them



Jumping Jack Compactor/Rammer

Policy

Jumping jack compactors make the job of compacting dirt easier. However, employees need to remember that there is a risk of injury when operating these machines. By following the safe work practices presented in this lesson, employees can help minimize their chances of an injury occurring while operating a jumping jack compactor.

Safe Work Practices

Before operating a jumping jack compactor, employees should do the following:

- Inspect all provided PPE. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Inspect the machine for damage. Report the damaged machine to your supervisor. Do NOT operate a damaged machine.
- Ensure that all provided guards are secured and in place. Do NOT operate a machine that is missing its guards.
- Ensure that the air filters are clean. Replace dirty air filters as necessary.
- Check the fuel level and refuel if necessary. Do NOT refuel near flammable material or ignition sources.
- Clear the working area of all obstructions.
- Check the dirt that the compactor will be working on. Do NOT operate this machine on muddy dirt.

When operating a jumping jack compactor, employees should do the following:

- Operate the machine in accordance with the manufacturer's instructions.
- Do NOT lift the machine alone. When lifting, use a two man lift or lifting equipment.
- Keep all non-operators out of the work area.
- Do NOT smoke while operating the machine.
- Do NOT operate the machine when its fuel cap is loose or missing.
- Do NOT start the engine if fuel has spilled or when fuel odor is present. Move the machine away
 from the spill and wipe the machine dry before operating it.
- Maintain your balance while operating the machine.
- Keep hands and feet away from the moving parts of the machine.
- Do NOT leave the machine unattended. If you need to leave, turn the machine off and wait for it to come to a complete stop before leaving.
- Do NOT transport the machine while it is running.
- Do NOT ride the machine. This machine is not a toy.
- Tell your supervisor if you start to fill fatigued while or after operating the machine. Take all designated breaks and stay hydrated.



• Store the machine in accordance with the manufacturer's instructions.

Kneeling and Squatting Techniques

Policy

Improper kneeling and squatting at work can put unnecessary strain on your body and lead to injury. Since back and knee injuries are incredibly slow-healing, it is best to avoid them altogether by practicing safe techniques when kneeling or squatting at work.

Safe Work Practices

Proper form during squatting includes:

- Keeping your spine straight, or in neutral position.
- Feet should be hip distance apart.
- Bend at the waist and use your leg muscles to lower yourself down.
- Keep your abs, glutes, and leg muscles activated so your back muscles are not strained.
- Avoid letting your knees go past your toes.

Proper form while kneeling includes:

- Keep your back straight, or in neutral position, as often as possible while kneeling.
- Stay in a "high kneeling" position with your body elevated and knees at a 90 degree angle.
- If you will be staying in one spot, kneel on a pad or cushion to protect your knees.
- Do not sit back, because your body weight will put too much pressure on your ankles.
- Try to change the kneeling position from time to time, this may include "half kneeling" on your left or right sides, or in a half lunge position with one leg propping up your body.

Additional Safety Steps:

- If possible, move your work from the floor to waist height to decrease the amount of kneeling.
- If available, switch to tools with extension handles that allow you to stand up while working.
- Do NOT twist while bending your back, particularly when using force to lift or push objects.
- Take breaks in between long periods of kneeling or squatting to stretch your muscles.



Ladders

Policy

Employees who exercise safe ladder use and safe work practices minimize their risk from falling, which can lead to serious injury and even death.

- Select the proper ladder for the job, consider load capacity, height, and type of ladder.
- Avoid electrical hazards do not use a metal ladder around exposed energized electrical equipment.
- Thoroughly inspect ladder before use.
 - Check joints between steps and side rails.
 - Make sure ladder rung is free from oil or grease.
 - Check for splints, loose bolts, or any defective or damaged parts.
- Remove defected ladders from service for repair or replacement.
- Use ladder only as designed, do not alter from manufacturer's specifications.
- Use proper erecting and positioning procedures, to ensure:
 - Footing support.
 - Top support.
 - Ladder security.
 - Safe angle of inclination.
- Wear appropriate attire and PPE.
- Do not erect ladders in front of unlocked or unblocked doors.
- Ascend and descend facing the ladder, while maintaining 3 points of contact.
- Do not lean out or overreach while on ladder.
- Ask for a helper to support the base of ladder for added ladder stability.



Lifting

Policy

Back injuries are considered one of the most painful and costly problems plaguing the workplace today. Back Injuries are second only to the common cold for lost time on the job.

- Test every load before you lift by pushing the object lightly with your hands or feet to see how easily it moves. This tells you about how heavy it is.
- Remember, a small size does not always mean a light load.
- Make sure the weight is balanced and packed so it won't move around.
- Loose pieces inside a box can cause accidents if the box becomes unbalanced. Be sure you have a tight grip on the object before you lift it.
- Handles applied to the object may help you lift it safely.
- To avoid hurting your back, use a ladder when you're lifting something over your head.
- Get as close as you can to the load. Slide the load towards you if you can.
- Don't arch your back--avoid reaching out for an object.
- Do the work with your legs and your arms--not your back.
- How to Avoid a Back Injury
 - Plan ahead before lifting: Knowing what you're doing and where you're going will prevent you
 from making awkward movements while holding something heavy. Clear a path, and if lifting
 something with another person, make sure both of you agree on the plan.
 - Lift close to your body: You will be a stronger and more stable lifter if the object is held close to your body rather than at the end of your reach. Make sure you have a firm hold on the object you are lifting, and keep it balanced close to your body. Keep the load close to your body. Having to reach out to lift and carry an object may hurt your back.
 - Feet shoulder width apart: A solid base of support is important while lifting. Holding your feet too close together will be unstable, too far apart will hinder movement. Keep the feet about shoulder width apart and take short steps.
 - Bend your knees and keep your back straight: Practice the lifting motion before you lift the
 object, and think about your motion before you lift. Focus on keeping you spine straight--raise
 and lower to the ground by bending your knees.
 - Tighten your stomach muscles: Tightening your abdominal muscles will hold your back in a good lifting position and will help prevent excessive force on the spine.
 - Lift with your legs: Your legs are many times stronger than your back muscles--let your strength work in your favor. Again, lower to the ground by bending your knees, not your back.
 Keeping your eyes focused upwards helps to keep your back straight.
 - If you're straining, get help: If an object is too heavy, or awkward in shape, make sure you have someone around who can help you lift.



o Wear a belt or back support: If you are lifting in your job or often at home a back belt can help you maintain a better lifting posture. A back belt or support will not prevent you from straining or hurting your back.

Lockout/Tagout (LOTO): Affected Employees

Policy

Lockout/tagout procedures may seem to be nothing but a hassle; however, these procedures help protect all employees who work with machines or equipment. Everyone may play a different role when it comes to carrying out the procedures, but everyone is a team when it comes to ensuring safety. The time taken away for maintenance and repair may seem unnecessary at times; however, when machines are properly repaired and maintained, employees will find that their work is more productive and safer.

Safe Work Practices

When a lockout/tagout is needed, affected employees should do the following to ensure everyone's safety during the process:

- Listen to all authorized employees when they notify you of a lockout/tagout. The information that they
 give you will be important as lockout/tagout could affect the lighting, air conditioning, or other
 factors of the work environment.
- Do NOT attempt to remove any locks or tags. These items are meant to be seen as a warning to other employees. Removing a lock or tag is illegal and could result in an authorized employee being injured or worse.
 - If a lock and tag needs to be removed, only your supervisor is allowed to do it and only after it
 has been established that the authorized employee is not at work and only when it is safe to
 do so.
- Do NOT attempt to turn on any machine or piece of equipment that has a lock and tag. Depending
 on the machine, attempting to turn it on could release any stored energy that didn't get removed
 from the machine, which could result in an injury or worse for the authorized employee.
- If a shift change is going to occur, ask who the authorized employee is in case you or other affected employees need to get in contact with them.
 - Tags should have the name of the authorized employee written on them.
- Remove yourself from the area or stay a safe distance away when authorized personnel are
 working on a machine or piece of equipment. This includes the time when authorized personnel are
 removing the locks and tags from machines.
- Do NOT work on a machine until you have been notified that the lockout/tagout is over.



Lockout/Tagout (LOTO): Authorized Employees

Policy

Lockout/tagout is an essential part of protecting employees while they perform certain tasks on a machine or piece of equipment. It takes everyone to make these procedures work; however, employees need to remember that they are responsible for their own safety. Lockout/tagout doesn't take too much time and it helps protect everyone.

Safe Work Practices

In addition to following the procedures of a lockout/tagout, employees should do the following to ensure their safety while performing maintenance or repair work:

- Assume responsibility for own safety while looking out for the safety of others.
- Communicate as much as possible with coworkers, especially during shift changes. Always
 provide as much information as possible to the person who will be taking over and do not leave
 until they have put their lock on and you have removed yours.
- Remember that each machine may have a different lockout/tagout procedure.
- Do NOT remove guards or other safety features while the machine is turned on or has power running to it.
- Only use your lock. Do NOT lend or trade locks with other authorized employees.
- Do NOT rush. It is better to take a few minutes and make sure everything has been properly
 performed than having an accident occur.



Loose Clothing, Long Hair, and Jewelry Safety

Policy

All employees want to be comfortable at work; however, loose clothing, loose long hair, and jewelry can potentially expose employees to harm when working with machines or certain types of tools. By following the safe work practices presented in this lesson, employees can help minimize their chances of an injury occurring by wearing the appropriate clothing, restraining long hair, and removing jewelry.

Safe Work Practices

Clothing

When wearing clothing in an industrial environment, employees should do the following:

- Follow all company-specific clothing policies.
- Wear close-fitting clothing or company-provided uniform.
- Avoid wearing clothing with tears or other damage.
- Tuck in shirts.
- Wear closed-toed or steel-toed shoes.
- Ensure that all shoelaces are tied prior to beginning work.
- Retie shoelaces if they come undone during the work day.
- If necessary, employees should roll up long sleeves.

Long hair

Employees who have long hair should do the following:

- Follow all company-specific hair policies.
- Tie back long hair.
 - Buns or other pinning methods are recommended.
- When appropriate, use hair nets or hats to keep hair up and out of the way.
- When appropriate, beard covering should be worn. The covering should hold the beard flush against the body.
- When appropriate, tie or bind the beard into a single strand and tuck it into the shirtfront.
- Shave facial hair when necessary.

Jewelry

Employees should remove jewelry prior to beginning their work. Jewelry can get caught in machines and tools, sometimes resulting in employees getting pulled into machines which could result in injury or death.



Machine Safeguards

Policy

Machines enable amazing things to be done. But machines can also cause disfiguring injuries and death, especially during operation, examination, lubrication, adjustment, and maintenance of the machine. Therefore, it is important to have some sort of safeguards to protect workers from machines.

Safe Work Practices

Safeguards must:

- Prevent contact
 - The safeguards must prevent any part of the worker's body from coming into contact with moving parts
- Be secure
 - The worker should not be able to easily remove the safeguard
- Protect employees from objects falling off the machine
- Create no new hazards
 - The guard should not have sharp edges or other dangers
- Create no interference
 - A safeguard must not impede the job the machine is meant to do
- Allow for safe, simple maintenance
 - o If possible, safeguards must allow for simple maintenance, such as lubrication



Machine and Tool Safety

Policy

If you cannot do a job safely with the machinery or tool that you are using, don't do it! Your safety and the safety of your coworkers is of extreme importance. Do a safety check each and every time you use machinery or tools. Do not take short cuts.

Safe Work Practices

General Machine Safety

- Know the hazards.
- Make a safety check.
- Make sure everyone is clear of the machine before starting it up.
- Check the guards and safety devices to make sure they are in place and properly adjusted.
- Do not operate power tools or machinery when you are ill, taking strong medications, fatigued or consuming alcoholic drinks. If you cannot do a job safely, don't do it.
- Do not smoke while working with tools and machinery.
- Keep your machine and tools clean and free of debris as well as the area you are working in.
- Avoid distractions and keep your mind on your work.
- Electrically powered machines and tools need to be grounded. Extension Cords are not to be used as a permanent source of electricity.

Proper Clothing and Personal Protective Equipment

- Do not wear loose-fitting clothing when working with machinery and tools.
- Jewelry and long hair could get caught in certain types of machinery and certain types of tools. Remove jewelry such as necklaces, rings and bracelets before using machinery and tools. Long hair should be secured so as to not get caught in machinery or tools.
- Long sleeves should be rolled up and secure so as not to get pulled into a machine or tool.
- Impact resistant safety glasses or goggles should be worn to protect your eyes.
- With some tools and machinery, safety shields, hard hats and aprons might be required.



Masonry Safety

Policy

A split second can make all the difference for safety in masonry. Therefore, be prepared by following all the safety rules and protect yourself and others from masonry hazards. Remember to keep guards on tools, set up and honor limited access areas, and use common sense, and you can remain safe.

- Site safety
 - Practice good housekeeping
 - Guard rebar and other protruding steel with caps or troughs
 - o Do not operate forklifts or cranes, or any other machines without the proper training
 - Make sure no one is under concrete buckets or other loads while they are being lifted or lowered into position
 - Never work under a suspended load
 - o Do not drop or throw items from heights
 - Always use proper fall protection when working at heights
 - OSHA requires a limited access zone "whenever a masonry wall is being constructed" to protect people from falling masonry.
 - If you are excavating or shoring, make sure the excavation is correctly done for the soil type and depth of the excavation
- Material and tool safety
 - Inspect your materials and tools to make sure they are in good working order
 - OSHA requires a dust reduction system when cutting into masonry if the dust levels are above the Permissible Exposure Level.
 - Keep the guards on all the tools you use
 - Do not put any part of your body into mixers while they are running, and make sure they are off and cannot be accidentally turned on before you reach inside
 - Make sure the required grid guards remain on at all times
 - Do not use damaged tools or other equipment
 - Do not remove forms and shores until a qualified person is sure the concrete is strong enough to hold itself up
 - Make sure tools that will come into contact with energized electrical conductors, like bull float handles, are made of nonconductive materials



Material Handling: Lifting

Policy

There are many back injuries that occur every year due to improper lifting. Using proper lifting techniques, following company policies and procedures, and these safe work practices should help to prevent such injuries from occurring.

- Before lifting, always test the load for stability and weight.
- For loads that are unstable or extremely heavy, follow management guidelines for:
 - Equipment use
 - Reducing the weight of the load
 - Repacking containers to increase stability
- Wear appropriate slip resistant shoes.
- Only wear gloves (if necessary) that fit and allow you to maintain a proper grip.
- Know your limitations, lift only as much as you can handle by yourself.
 - Seek assistance or use mechanical means if it is too heavy.
- Keep the lift in your "power zone". The power zone includes the following:
 - Above the knees
 - Below the shoulders
 - Close to the body
- Preventative maintenance is important, whenever possible you should:
 - Reduce reaching and bending.
 - · Reduce the stress on your back and shoulders.
 - Reduce the effort and force needed to perform the task at hand.



Material Handling: Safe Operations

Policy

Think how your actions will affect others. What will be the result of your action or lack of action? When you see a condition or circumstance that is not as you think it should be, tell someone, do something.

- Size Up the Load
 - Determine if you can carry a load comfortably. Don't carry a big load alone.
 - Get help if the load is too big or bulky for one person.
 - Check for nails, splinters, rough strapping, and rough edges.
- Look for Special Hazards
 - Aisles and passageways must be kept clear of obstruction.
 - Watch for pedestrians.
 - Materials spilled in walkways must be cleaned up immediately.
 - When present, markings on aisles and walkways must be obeyed.
 - Materials or equipment must be stored so that sharp projections will not interfere with walkways.
 - Materials must be stored so adequate headroom is provided for the entire length of any aisle or walkway.
 - Watch for trip hazards.
 - Safe clearance must be allowed for walking in aisles where motorized or mechanical handling equipment is operating.
 - Bridges over conveyors and similar hazards must be kept in place.
- Wear Appropriate Protective Equipment
 - Never perform a task for which PPE is required but not available
 - Always wear and use required PPE correctly
 - Never use PPE that is defective or damaged
- Use the Right Equipment the Right Way
 - Keep clothing, fingers, hair, and other parts of the body away from the conveyor
 - o Don't climb, step, sit or ride on conveyor at any time
 - Don't load conveyor outside of the design limits
 - Don't remove or alter conveyor guards or safety divides
 - Know location and function of all stop/start controls
 - Keep all stopping/starting control devices free from obstructions
 - All personnel must be clear of conveyor before starting
 - Report all unsafe practices to your supervisor
- Hand Trucks. Carts and Dollies



- Use the two-wheel hand truck only when handling light loads. Always use the four-wheel hand truck for heavy loads.
- Always make sure the weight is evenly distributed on all wheels of a hand truck, cart or dolly, especially with four-wheeled hand trucks with side railings.
- Never pull a cart, dolly, or hand truck. Always push it when moving loads.
- Secure loads with heavy-duty nylon belts.



Mental Health

Policy

Employees in all industries may be living with or experiencing mental illness. While mental health issues are becoming less stigmatized due to greater awareness, many employees may choose to stay silent about their condition.

Safe Work Practices

SYMPTOMS OF MENTAL ILLNESS

Everyone at some point or another experience changes in feelings or actions. However, changes in feelings or actions that continue for two or more weeks may be indications of metal illness. Symptoms of mental illness can appear differently in every individual. When experiencing or living with mental illness, emotions or changes in behavior can be amplified. Some signs of mental illness include the following:

- Feelings of worry or fear.
- Having problems concentrating or experiencing confusion more than normal.
- Feelings of being flat or numb.
- Feelings of anger, irritability, or aggression.
- Being unconcerned with your appearance.
- Feelings of sadness or hopelessness.
- Feeling low or excessively tired.
- Having trouble relating to others.
- Avoiding friends or social activities.
- Change in sleeping habits.
- Uncontrollable thoughts after a traumatic event.
- Changes in eating habits, which may include increased hunger or lack of appetite.
- Thoughts of suicide.
- Change in sex drive.
- Difficulty perceiving reality including delusions or hallucinations.
- Physical problems such as headaches, racing heart, stomach aches, and/or unexplained aches and pains which have no obvious cause.

REACHING OUT

Coworkers, friends, and family play an important role in helping encourage those who live with or are experiencing mental illness to seek support and treatment. If you, a friend, a relative, or coworker is experiencing any of the following, please reach out for help:



- Abusing drugs or alcohol.
- Having a hard time recognizing their own unusual behavior.
- Seeming unable to carry out daily activities or handling daily problems and stress.
- Talking about suicide.

SUPPORT AND TREATMENT

Mental illness can be managed and treated. Treatment for the most common conditions of mental illness are effective 80% of the time. Treatment should be done with the help of a professional such as a doctor, psychologist, or licensed mental health provider. Depending on the individual needs, treatment plans may include any of the following:

- Peer support
- Medication
- Therapy sessions (one-on-one, or with a small group)

If you or someone you know needs help finding treatment options, you can:

- Ask your doctor
- Call 1-800-273-HELP (4357)
- Text: 1-800-487-4889
- Visit: https://findtreatment.samhsa.gov/

If you or someone you know is a veteran and is in crisis or needs help finding treatment options, please contact one of the following numbers:

- Veterans in crisis Call: 1-800-273-8255 and Press 1 or text 838255
- Treatment options Call 1-866-966-1020

If you, a friend, relative, or coworker are in crisis and experiencing thoughts of suicide:

- Call (or direct a person to call): 911
- Call (or direct a person to call): 1-800-273-TALK (8255)
- Text: 1-800-799-4889
- Go to the nearest emergency room



Night Shift Safety

Policy

Working night shift can make ordinary tasks more dangerous than they might be during the day, but you can stay safe by following all of the appropriate safety guidelines.

- Employees transitioning from days to nights must be conditioned slowly into working night shift.
 - Starting a night shift schedule without letting your body adjust will make injuries and stress more likely.
- Try to stick with a night shift schedule or just a day shift schedule instead of switching back and forth. Each time you switch, your body will attempt to adjust your circadian rhythm which will cause physical and mental fatigue.
- Employees must understand their job duties and corresponding safety responsibilities.
- Make sure that adequate lighting is used to avoid working in the dark.
- Take frequent, short breaks especially during the early morning hours when employees are more likely to have lower energy levels than any other time.
- There should always be an emergency plan in place regarding emergencies such as natural disasters or even attacks or robberies. Night shift workers must be aware of the procedures and be prepared to follow protocol if needed.
- Never working alone in confined spaces.
- Do not operate dangerous equipment or tools unless you have been properly trained and authorized to work on that specific piece of equipment by yourself.
- When working alone, always make sure somebody knows where you are.
- Keep your cell phone charged and have important numbers stored in case of an emergency.
- Before starting your tasks, and throughout the task, pay attention to your surroundings to assess any potential hazards.
- If you will be driving, have a clear travel plan and make sure others are aware of this plan.
- Be extremely careful and aware of your surroundings when walking to your car in the dark, especially if you are alone.



Noise Induced Hearing Loss

Policy

NIHL is a condition that employees can develop over time if they do not wear the appropriate hearing protection while working in loud environments or with loud pieces of equipment. However, this condition is preventable. Employees need to remember that are responsible for their safety, including their hearing.

Safe Work Practices

When an employee works in an environment or with equipment that exceeds 90 decibels, they should wear the appropriate hearing protection. When choosing and using hearing protection, employees should do the following:

- Inspect all hearing protection for damage and a comfortable fit. Do NOT wear damaged or improperly fitting hearing protection. Report all damaged hearing protection to your supervisor.
- Ensure that the hearing protection chosen fits with the work that you will be doing.
- Wear all hearing protection in accordance with the manufacturer's instructions.
- Do NOT remove hearing protection until you have either turned off the piece of equipment being used or you have left the area.
- Do NOT use headphones that are meant for music or other entertainment in place of proper hearing protection.
- Store all hearing protection in accordance with the manufacturer's instructions.



Office Ergonomics

Policy

Neutral posture is a comfortable working posture in which your joints are naturally aligned and your risk of developing a musculoskeletal disorder is reduced. The following are the important components of neutral posture while seated.

- Keep your head level or tilted slightly downward.
- Place your work in front of you so that you are looking straight ahead.
- Sit with your shoulders relaxed, not elevated, hunched or rotated forward.
- Keep your elbows close to your sides and bent at about a 90 degree angle, not extended out in front of your body.
- Use the chair's backrest to support your lower back or lumbar curve.
- Sit with your entire upper body upright or leaning slightly back.
- Keep your wrists straight while you work, not bent up, down or to the side.
- Sit with your knees at the same level or slightly below the level of your hips. There should be no pressure points along the backs of your thighs or at the backs of your knees.
- Place your feet lightly out in front of your knees and make sure they are comfortably supported, either by the floor or by a footrest.



Office Operations

Policy

The importance of maintaining a safe office environment cannot be understated. Any and all accidents can be prevented if employees are aware of the surroundings and follow these safe work practices.

- When working with a computer, adjust and position all furniture to minimize strain on the body.
- Cabinets and desk drawers that are lower to the ground should not be left open, this could cause a tripping hazard.
- Use caution while opening and closing drawers to avoid pinching fingers.
- All appliances (coffee pots and microwaves) should be kept in working order, watch for signs of wear and tear or fraying of electrical cords.
- Material should not be stacked precariously on top of lockers, file cabinets or other high places.
- Equipment such as scissors, staplers etc., should be used for their intended purposes only.
- Periodic breaks should be taken to rest your eyes if you constantly work with a video terminal.
- Use caution to avoid the sharp edges of furniture.
- Exercise caution when using any cutting devices.
- Everybody should be familiar with all location of exits, alarms, fire extinguishers, first aid kits and telephones.
- Upon hearing fire alarm, proceed to the nearest exit in an orderly fashion.
- Never try to lift an object that is too heavy alone. Get help from a co-worker if necessary.
- Never disconnect plugs by pulling on the cord, grasp the plug firmly and pull straight out.



Office Safety

Policy

Office safety is an essential practice that needs to be reviewed periodically in order to prevent common office mishaps.

Safe Work Practices

- Slips, Trips, and Fall
 - Make sure carpeted areas are flat with no signs of fraying, tears, and lifts.
 - Use mats in entry ways to prevent slippery/wet floors; especially in the rainy seasons.
 - Do not run wires or cables in the middle of common walkways.
 - Keep hallways and walkways clear of boxes, filing cabinets, and other excess clutter.
 - Office chairs are never to be used for horseplay or as a step stool.
 - Chairs must remain on all legs on the ground at all times; do not recline in a chair unless it is made to do so.
 - Do not sit on counter tops, desktops, or any surface not intended to be used as a seat.

Cuts and Punctures

- When using sharp objects such as knives, scissors, letter openers, etc. cut away from your body.
- Keep your fingers clear when using staplers, paper cutters, and when closing drawers.
- Check the office for exposed nails, sharp edges, and any objects that could puncture the skin.

Lifting

- Keep a balanced stance with feet shoulder-width apart.
- When lifting from the ground, bend your knees, and keep your back straight. Do not bend over and arch your back.
- Never carry a load that is so large it will block your vision.
- If something is too heavy ask someone for help. You are not impressing anyone by carrying something that is excessively heavy alone.

Space Heaters

- Never leave the heater unattended for any reason.
- Do not use a heater that has a damaged cord, plug, has been dropped, or shows any signs of damages or malfunctions.
- The heater must be at least 3 feet from any combustible materials such as furniture, papers, boxes, clothing, purses, etc. at all times.
- Disconnect the heater by setting the power control to the OFF position and then unplug.
 Unplug the heater when not in use.
- Wait for it to cool completely before moving or handling the heater.



- You may not plug the heater into an extension cord, power strip, or an outlet that has other electrical appliances plugged into it. This may overload the circuit and create a fire hazard.
- Heaters are not to be used in areas with an excess amount of moisture or water (i.e.: bathrooms) unless the heater is specifically manufactured to do so.



Oil Spill Safety Procedures

Policy

Spilled oil is a nuisance, but it can also be hazardous if the proper safety procedures are not followed during clean up. All personal protective equipment must be worn, and safety steps followed in order to do this task correctly.

Safe Work Practices

If an oil spill is discovered, the following safety steps must be followed:

- The spill response team must be alerted right away to deal with oil spills as soon as possible.
- Correctly identify the oil or oils to make sure it is compatible with the sorbent you will be using.
- Personal protective equipment that is required may include slip resistant footwear, a respirator, and gloves depending on the oil and sorbent involved.
- Containment of the oil spill must be first priority:
 - Form a dam around the spill with the correct absorber to prevent it from spreading all absorbents must be used according to the manufacturer's instructions.
 - Sweep up and properly dispose of any residue or waste.
- Replace the absorbent and replace or decontaminate personal protective equipment used immediately after cleaning up the spill.
- Report any oil spill that cannot be completely contained and cleaned up if it discharges into a storm drain, creek, bay, the ocean, or any outdoor soil or paved surface by contacting Environment, Health & Safety.



Open Trench Safety

Policy

Open trenches can be extremely dangerous if precautions are not taken to ensure employee safety. Employees should follow all company safety rules and these safe work practices to ensure a safe work environment.

- All trenches should be thoroughly examined before entering.
- Protect employees from cave-ins by using an adequate sloping or support system.
- Always know of and have a means for exiting the trench in case of an emergency.
- Workers should stay away from any equipment that is loading or unloading material.
- Any equipment or material should be kept two feet or more from the edge.
- Excavation and trench sites should be tested for an oxygen deficiency before employees are allowed to enter them.
- Surface crossing of trenches is strongly discouraged.
- Water accumulation in trenches should be avoided if possible.
- Rocks, soil, equipment and other materials should be kept from falling into the trenches.
- Trenches should be opened only the minimum amount of time that it takes to complete the job.



Operator and Ground Worker Safety

Policy

Every year, heavy equipment operators and ground-workers are injured or killed by heavy mobile equipment used in construction. Working safely in the area of any heavy equipment requires the shared responsibility of both the equipment operator and ground-workers.

- Only trained persons should operate heavy machinery.
- Wear high visibility clothing and appropriate PPE and attire.
- Avoid distractions and actions that could interfere with good communication (e.g., headphones, loud music, etc.).
- Do not engage in horseplay.
- Be aware, stay alert and know your equipment's blind spots whether you're the operator or just working around it.
- Communicate with people working around you either via two-way radios or a spotter who's been trained on standard hand signals. Never assume people know what you're going to be doing.
- Always wear your seat belt.
- Don't climb on or get off equipment while it's moving.
- Never exceed the load that a machine is rated to carry.
- Inspect equipment before operation.
- Adjust all side and back mirrors to help compensate for blind spots.
- Ensure workers are clear of equipment before operating.
- Establish eye contact with the operator before approaching danger zone.
- Unless it is essential to the task, all personnel should stay away from all sides of heavy equipment while it is in use.



Personal Protective Equipment (PPE): Arm Guards

Policy

Arm guards, or protective sleeves, are pieces of personal protective equipment made of strong synthetic fiber used to protect arms from injury. Arm guards come in many styles and sizes and are made for many different hazards. It is important to know the appropriate style and size for the task. Employees who wear the inappropriate style of arm guard for their task, or using their arm guards inappropriately, could potentially be exposed to harm. Following the safe work practices presented in this lesson will help ensure employee safety.

Safe Work Practices

HOW TO USE

It is important to know how to appropriately use arm guards. Employees should do the following:

- Inspect the arm guards for damage, stretching, or fraying. Report any damaged arm guards to your supervisor.
- Keep the arm guards clean. Arm guards need to be cleaned regularly. Clean arm guards according
 to the manufacturer's instructions.
- Use the appropriate arm guards for the work and environment according to the manufacturer. Consult your supervisor if you are unsure as to what guards should be used.
- Ensure the arm guards fit. Too large or too small sizes negatively impact the effectiveness and comfort of the guards.



Personal Protective Equipment (PPE): Back Braces

Policy

OSHA and NIOSH neither recommend nor forbid use of the back brace for lifting heavy objects, instead reminding people to follow proper lifting techniques. Even though the usefulness of a back brace is debatable, proper lifting techniques are not, and you can avoid back injury as long as you follow those techniques.

- Do not use your back to lift; instead lift with your knees
- Keep the load close to the body
- Do not twist your waist but keep your feet frozen while carrying something
- Keep the load between shoulder and knuckle height
- Ask for help if something is too heavy for you to carry by yourself
- Be sure your pathway is clear so you do not have to make any awkward movements



Personal Protective Equipment (PPE): Dielectric Boots and Gloves Safety

Policy

Dielectric boots are rubber boots used where there is a risk of electric shock from high voltages. Boots are used for working on live power or in the area of live power as currents can jump large distances, especially in wet or damp conditions, which could result in a fatal incident. Dielectric gloves are rubber insulating gloves used for electrical workers. To be effective, electrical safety gloves must incorporate dielectric properties and physical strength, along with flexibility and durability. To help ensure safety and performance, they should meet and/or exceed the requirements of the ASTM (American Society for Testing and Materials) International ASTM D120-14a standard specification for rubber insulating gloves.

Safe Work Practices

Once the electrical safety gloves and or boots have been issued, federal and state OSHA regulations require that protective equipment be maintained in a safe and reliable condition. Gloves and boots should be inspected for any damage before each use and immediately following any incident that may have caused damage. Federal and state OSHA regulations also require that insulating gloves be given an air test along with the inspection.

Things to look for during inspection:

• Cuts, holes, cracks, etc. Damaged gloves and boots can lead to serious injury.

In addition to the daily inspection, federal and state OSHA regulations require electrical safety equipment to be subjected to periodic electrical tests:

- 2.5kV test for 60 seconds.
- Inflation test to check for any cracks, holes, cuts, etc. Inside and outside of gloves.
- Boot sole test at 35kV on the sole for 3 minutes.
- Boot tests at 5kV proof voltage and 20kV withstand test.
- Production test at 20kV withstand test.



Personal Protective Equipment (PPE): Disposable Dust Masks and Respirators

Policy

Disposable dust masks and respirators are a safe and cost-effective option for some jobs. Do not use this type of respiratory protection unless you are sure it will be sufficient for your job and you understand all safety guidelines related to their use.

- Do not use disposable respirators for lead, asbestos, cadmium, gases, vapors, fumes or smoke.
- Wearers of disposable respirators conduct a fit check each time they put on a respirator.
- Only choose respirators that display a label or statement of certification by NIOSH (National Institute for Occupational Safety and Health) on the packaging or respirator itself.
- Read all instructions provided by the manufacturer and adhere to the recommendations regarding the proper use, maintenance, cleaning, care, and warnings.
- Confirm that a good face seal is achieved by pinching the metal bar around your nose and making sure there are no gaps between the mask and your face.
- Never share disposable respirators with others.
- Keep respirators protected from moisture, dust or other contaminants at all times.
- Do not use a misshapen or bent disposable respirator.
- Prevent others from reusing a disposable respirator by breaking the straps when finished.
- Discard immediately if, at any time, the disposable respirator:
 - Becomes damaged or deformed;
 - No longer forms a seal;
 - Becomes visibly wet;
 - Becomes difficult to breathe through; or
 - Becomes contaminated in any way.



Personal Protective Equipment (PPE): Eye Protection and Preservation

Policy

Prevention is the key to protecting your eyes. Your ability to see is a very valuable asset. Don't take risks with your eyesight. Eye injuries are often permanent.

- The primary prevention to eye injury is protection. Keeping the eyes shielded with the proper equipment is essential.
 - Safety Glasses: These are the most commonly used eye protection. They are made much stronger than street-wear lenses. They are impact resistant and come in prescription and non-prescription.
 - Goggles: These are very similar to the safety glasses, but they fit much closer to the eyes.
 These are necessary when working in situations which could result in chemicals splashes, fumes vapors and dust injuries.
 - Face Shields: Full-face shields are often required to guard against molten metal and chemicals splashes. These shields can be made to fit over a hard hat or to wear directly on the head.
 - Equipment Guards: Plant equipment and machinery is the source of many eye injuries. Be sure to use guards, screens and shields that are attached to any equipment. Make sure they are always in place and used along with additional eye protection.
- If an injury does occur, prompt attention is essential.
- Sudden Blow to the Eye
 - Apply a cold compress without pressure, or tape crushed ice in a plastic bag to the forehead and allow it to rest gently on the injured eye.
 - Seek immediate medical attention if pain continues, if vision is reduced, or if blood or discoloration appears in the eye.
- Penetration of the Eye
 - Do not wash out the eye.
 - Do not try to remove a foreign object stuck in the eye.
 - Seek immediate medical attention.
- Chemical Splashes
 - Check the label for specific first aid instructions and follow those instructions.
 - If washing of the eye is on the label for treatment, wash the eye out for at least fifteen minutes.
 Hold the eye open with your fingers and look into the running water.
- Foreign Particles
 - Flush the eye with water until the foreign object has come out.
 - If for some reason you cannot rinse the eye, loosely bandage it and get emergency medical treatment.
 - Never rub or try to remove objects embedded in the eye.



Personal Protective Equipment (PPE): Foot Safety

Policy

Proper footwear is important, not only for foot comfort but also for one's general well-being. Improper footwear can cause or aggravate existing foot problems. Workers may be exposed to various hazardous conditions on the job, including slippery surfaces, climbing hazards, handling or working around heavy equipment and machinery and working around electricity. These different working conditions may require different safety footwear to protect the foot, and the worker, from injury.

- The OSHA regulations require foot protection when there is a danger of foot injuries. Depending on the specific hazards, employees may need to wear special foot protection such as:
 - Rubber or wooden-soled shoes for wet or slippery surfaces
 - Reinforced impact-resistant work shoes or boots to protect feet and toes from being bruised or crushed
 - Rubber or neoprene boots to protect against chemical hazards
 - Metal insoles or reinforced soles to protect against punctures
 - Non-conducting shoes, with no metal or nails, for working around electricity
- Even when special protective footwear isn't needed, work shoes or boots should:
 - Fit comfortably, without slipping or pinching the foot or toes.
 - Be solidly constructed of sturdy materials that can resist wear and tear.
 - Provide good foot support.
 - Have low heels and nonskid soles for good traction.
 - Be in good condition, with no rips or holes.
 - Fasten securely; laces shouldn't drag on the floor.



Personal Protective Equipment (PPE): Hand Protection

Policy

Protecting your hands is an extremely important part of your job. Gloves can help protect your hands from cuts, burns, frostbite, abrasions, punctures, chemical exposure and biohazards. Protecting your hands by wearing the appropriate gloves can help you to achieve the highest productivity in the safest manner possible.

- Leather Gloves
 - Protects against abrasions
 - Good for working with wood to protect against splinters
- Cut-Resistant Gloves
 - This type of glove is form fitting and allows for a lot of dexterity.
 - Good for working with knives and for gripping.
- Heat-Resistant Gloves
 - Good choice for applications requiring moderate protection or handling rough, sharp metal parts and for high heat protection.
- Chemical-Resistant Gloves
 - Since no one coating can protect against every chemical, it is important to know what chemical or chemicals you are working with so that you choose the right type of glove with the right coating.
- Vibration-Resistant Gloves
 - Jobs involving repetitive impact and vibration can lead to carpal tunnel syndrome and other debilitating injuries.
 - Good for when you are using pneumatic tools, rivet guns or jack hammers.
- Welding Gloves
 - Depending on the heat protection, durability and dexterity you require, will depend on the type of welding glove you will need.
- Mechanic Gloves
 - Designed for dexterity as well as guarding against scrapes and nicks.
- Cold-Condition Gloves
 - Designed for warmth, grip and dryness.
 - Good for those who work in refrigerated areas as well as outdoors.
- Disposable Gloves
 - Disposable gloves are used in food, industrial, light chemical, dental and medical applications.
 - Disposable gloves are available in polyethylene, vinyl, latex, and nitrile. They are also available in varying thicknesses (measured in millimeters) from 3 mil to 15 mil.



Personal Protective Equipment (PPE): Hard Hats

Policy

Wearing a hard hat is the first line of defense against head injuries on the job. Prevention of head injuries is an important factor on any job site.

- Maintenance of your hard hat will help it to last longer and keep you protected. Doing a shell degrading test would include the following:
 - Compress the shell inward from both sides about 1 inch.
 - Release without dropping the shell.
 - The shell should return to its original shape quickly.
 - If elasticity is not similar to a new shell, it should be replaced.
- The hard hat shell should be replaced if:
 - The brim or shell is nicked, cracked, perforated or deformed.
 - Chalking or fading of the surface.
 - · Flaking of the surface.
 - The shell is stiff or brittle.
 - The helmet has been struck by a falling object.
 - The helmet has had an electrical contact.
- Check the suspension and if you see any of the following, replace the suspension:
 - Cracking
 - Tearing
 - Fraying
 - No longer holds the shell from 1 to 1-1/4 inches away from the head.
- Cleaning
 - Remove the head liner and inspect for defects. (If there are defects, replace the liner.)
 - Immerse the shell in hot water and detergent for one minute.
 - Scrub.
 - Rinsed in clear hot water.
 - Inspect for defects. (If there are defects, replace the shell.)



Personal Protective Equipment (PPE): Hearing Protection

Policy

Hearing protection is just one part of a complete hearing conservation program that should include engineering controls, administrative controls, and available hearing protection devices. Employees must obey all applicable guidelines in the hearing conservation program, including wearing hearing protection devices when necessary.

Safe Work Practices

The choice of hearing protective devices may depend on the noise level, comfort, and the suitability of the hearing protection device for both the worker and the environment. The three general types of hearing protection are:

- Ear plugs are pre-formed or moldable pieces of foam that are inserted to block the ear canal. These typically have a noise reduction rating between 20 and 30 which means that wearing them will reduce the existing noise by 20-30 decibels based on laboratory test data.
- Ear caps seal the opening to the ear without actually entering the ear canal. These typically have a NRR between 20 and 30 decibels.
- Ear muffs consist of a headband connecting two hard outer cups that fit around the ear and contains sound-reducing material with soft ear cushions inside. These typically have a NRR between 20 and 35 decibels.



Personal Protective Equipment (PPE): Knee Pads

Policy

The knee is the largest joint in the body, making it the most susceptible to injury. Unfortunately, the knees are also made up of the slowest healing tissues (cartilage and tendons), which means that injuries in this area heal very slowly. If your work exposes you to pressure or impact to the knees in any way – wearing knee pads is a necessity.

- Types Knee pads wrap around your knee joint, and provide needed support to that area. The amount of support you need should determine what kind of knee pads to wear.
 - Cloth Brace these slide on like cuffs and protect the back of your knee as well as the knee cap in the front. They fit snugly to offer gentle support without being bulky.
 - Soft Cap provides more cushion and support than a cloth brace, while still allowing free range of motion and flexibility.
 - Hard Cap offers the most protection from long periods of kneeling. Includes a rigid outer shell that may be rubberized – ideal for flooring projects, as the rubber will not scuff new floors as they are put in.
- Jobs that put pressure or strain on your knees should always be done with knee pads
- Make sure you wear the right type of knee pad for the job
- The added support that knee pads provide during jobs that require frequent use of your knees should increase your performance and speed
- Immediately call your healthcare provider if you are experiencing sudden or increased pain to your knee joints



Personal Protective Equipment (PPE): Respiratory Protection

Policy

Respirators are a means of protecting you from harmful fumes, dust, vapors and gases that may cause cancer, lung impairment or other respiratory diseases. The improper use of respiratory equipment can cause death so proper use and maintenance are of extreme importance.

- Respirator selection use the right respirator for the job.
- Respirator should be stored in a clean and sanitary location.
- Respirators should be inspected before and after each use.
- Check for defects such as tears in the facepiece, missing straps and missing valves.
- Respirators should be replaced if damaged or not working properly.
- Tight-fitting respirators should not be worn by those with beards.
- Know when and where to use respiratory protection.
- Know what type of respirator protection to use.
- Maintain your equipment and replace when needed.
- Get re-evaluated every year.
- Employees should leave the area where respirators are required for any of the following reasons:
 - To replace filters or cartridges.
 - When they smell or taste a chemical inside the respirator.
 - When they notice a change in breathing resistance.
 - To adjust their respirator.
 - To wash their face or respirator.
 - If they become ill.
 - If they experience dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever or chills.



Personal Protective Equipment (PPE): Spill Cleanup

Policy

Whether you are working in a research laboratory or a chemical processing plant, spills can be hazardous to your health. Therefore, if you need to clean up spills, you must wear the proper Personal Protective Equipment (PPE).

- Have the proper PPE on hand before there are any spills
 - Spills won't wait for you to find and buy the right PPE because they happen without warning
 - Gather information about all chemicals that could spill so you are prepared for the worse that can happen
 - Assess what you have on hand: you may already have the correct PPE to deal with spills if you are exposed to the chemical as part of regular work
- · Keep your PPE in an easily accessible area
- Keep your PPE clean and regularly maintained
 - Dirty or fogged lenses could impair vision
 - Holes in gloves, suits, or shoes could allow hazardous substances to come into contact with the body
- Participate in training and drills
 - Get used to your PPE so when a real emergency happens, you aren't wasting time trying to navigate the awkward suits, gloves, masks, or boots



Pneumatic Boring

Policy

Pneumatic boring refers to the process of creating a horizontal hole underground between two points without disturbing the surface ground. Product such as conduits or utility services are then run between the two points. When employees learn how to safely perform pneumatic boring, they can contribute to an overall safe work environment.

- Read and understand the operator's manual for all equipment being used.
- Inspect the machine for any broken or malfunctioning parts.
- Check markers for utility lines.
- Check the depth of the hole/trench in which you will be working.
- Do not bore alone. This type of boring requires two people.
- Before starting, uncoil the hoses that came with the machine as to avoid twisting during the boring process.
- Lubricate all parts accordingly.
- Check the psi of the air compressor. Ensure that you are using the correct machine.
- Ensure that the airline is clear of any contaminants or debris before connecting the hose to the boring part of the machine.
- Follow fastening instructions for the air hose to the tool.
- Double check your measurements.
- Determine if you need the boring cradle or not. If it is determined that one is necessary, secure it to as flat of a surface as possible in the trench/hole.
- Check alignment of the tool after starting tool.
- If you accidentally damage a utility, stop the boring and contact the utility company.
- When the job is finished, ensure that all hoses have been disconnected from the air compressor and tool.



Pneumatic Tool Safety

Policy

Pneumatic tools can make work more efficient, but can also be dangerous. Most of the dangers of using pneumatic tools can be avoided if you prepare to use them, wear the proper personal protective equipment, and remember to avoid certain dangerous practices.

Safe Work Practices

Preparation

- Read the entire instruction manual before you begin operating the tool.
- Clean and oil your tools regularly.
- Check the hoses for damage.
 - Replace a damaged hose with a new one immediately.
- Use clean, dry compressed air.
- Set the tool pressure accurately.
- Blow any air out of the line before attaching a tool.
- Consider attaching the tool to the hose with a locking device, chain, or a short wire for added protection.
 - If the hose detaches while air is going through it, the hose will violently whip around and could cause injury to people in the workplace.
- Ensure the hose doesn't present a tripping hazard.
- Post signs at a safe distance notifying bystanders that pneumatic tools are being used in the area.
- Set up screens to protect nearby workers from being struck by flying fragments.

Don'ts of Using Pneumatic Tools

- Don't let the tools get clogged or jammed.
- Don't use any attachments that don't belong with the tool.
 - Don't force a tool to accept an attachment.
- Don't exceed the tool manufacturer's recommended air pressure.
- Don't point the tool at yourself or another person.
 - Some tools, such as nail guns, should be treated with the same caution as regular guns.
 - Nozzles of pneumatic tools can fire rust particles at high velocity and cause injury.
- Don't use compressed air for cleaning unless fitted with an attachment that reduces the pressure to 30 psi.
- Don't ever use compressed air on yourself.
- Don't carry tools by the air hose.



Pothole Excavation

Policy

When employees follow the safe work practices presented in this lesson, they find that their work site is safe and secure, with a minimization of accidents and injuries.

- Ensure that the proper engineering and work practice controls are being utilized to minimize exposure to silica dust.
 - When engineering and work practice controls are not enough to minimize exposure to silica dust, wear the respiratory protection provided by the employer.
- Read and understand the operator's manual for the specific machine being used for the excavation.
- Inspect the machine for any malfunctions or broken parts.
- Should any malfunctions or broken parts be found, report such issues to your supervisor and do not
 operate that machine.
- Wear the appropriate personal protective equipment required for operating the machine needed for the excavation.
- Clear away any debris or obstructions from the excavation spot before starting the machine.
- If a utility line is damaged and it's in an area with traffic, stop traffic from driving near the jobsite.
- If a utility line has been damaged, contact the local utility company.
- Make sure that the machine being used for excavation is on a stable and level surface.
- If the machine is mounted on a trailer, make sure that the trailer is secured to the transport vehicle.
- When the excavation is complete, make sure to clean and shut off the machine as directed in the operator's manual.



Pouring Concrete Safety

Policy

Pouring concrete safely and following proper procedures can greatly reduce the risk of injury or illness. Employees should ask their supervisor if they are unsure about any polices or procedures regarding concrete pouring.

- Wear appropriate PPE and attire.
- Make sure equipment is properly setup and used.
- Wash contaminated skin areas as soon as possible.
- Rinse eyes splashed with wet concrete or exposure to cement dust as soon as possible and follow appropriate first-aid procedures.
- Eat and drink only in dust-free areas.
- Mix dry cement in well-ventilated areas.
- When kneeling on fresh concrete, use a dry board or waterproof kneepads to protect knees from water that can soak through fabric.
- Remove jewelry such as rings and watches because wet cement can collect under them.
- Make sure there are procedures in place to rinse PPE and equipment.
- Communicate with crew and understand the job operation to know your responsibilities and risks.



Power Tool Safety

Policy

Power tools are such a normal part of our lives we sometimes forget to take the proper precautions for our safety, resulting in injuries ranging from eye injuries to electrocution. The following are helpful tips for power tool safety.

- You should always inspect every tool before you use it. Look for:
 - Missing parts (such as safety guards)
 - Loose or dull blades
 - Cuts in plug and cord insulation
 - Defects or cracks in the tool housing
 - Problems with guards and safety shut-off switches
 - If you do find something wrong with the tools, remove them from service and label them "Do Not Use" until repairs are made.
- Common protective gear includes:
 - Gloves
 - Ear plugs
 - Eye protection
- DO NOT wear loose or baggy clothing or jewelry- it may get caught in the tool and cause damage to you or the tool
- Be sure the work area is free of clutter and well lit
- Be especially mindful of flammable materials and rags- sparks from the tool could start a fire
- Try not to use the tools in wet and conductive locations, but if you do, be sure the tools are grounded
- Using the tool
 - Know where the emergency shutoff switch is
 - Do NOT use the tool for anything else other than what it was designed for
 - Keep all people not involved with the work at a safe distance from the work area
 - Do not hold fingers on the switch when carrying the tool
 - Keep good balance and posture while using the tool
 - Know where the cords are to avoid tripping or cutting the cord
- After use
 - Do NOT carry the tool by its cord
 - Store the tool in a safe place
 - Sharpen and clean the tools- follow the owner's instructions
- When working with power tools, remember:
 - Don't operate a tool unless you know how to use it
 - Inspect the tool before you use it



- Wear proper clothing and gear
- Prepare your work area
- Use the tool properly and be aware of your surroundings
- Safely store the tool until next time



Power Tools: Cordless Drill

Policy

While easy to use, cordless drills can potentially expose employees to harm if they are used improperly. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring when using a cordless drill.

Safe Work Practices

Before using a cordless drill, employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Tie back long hair and remove all jewelry prior to using a cordless drill.
- Inspect the drill, the battery, and bits for damage. Report damaged drills, batteries, and bits to your supervisor. Do NOT operate a drill that is damaged. Do NOT use damaged batteries. Do NOT use damaged bits.

When using a cordless drill, employees should do the following:

- Operate the drill in accordance with the manufacturer's instructions.
- Do NOT operate a cordless drill if you are under the influence of drugs or alcohol or are feeling tired.
- Be aware of your surroundings.
- Keep the work clean and well lit.
- Ensure that the switch is in the OFF position before connecting the battery pack.
- Do NOT touch moving parts.
- Do NOT overreach.
- Do NOT force the drill.
- Do NOT use in wet or rainy conditions.
- Maintain good foot balance when operating a cordless drill.
- Disconnect the battery from the drill before making adjustments, changing accessories, or storing in its designated storage area.
- If the drill comes with a trigger lock, it is recommended that employees activate the trigger lock when the drill is not in use.
- Hold the drill firmly with two hands.
- Ensure that all items that are going to be drilled are secured.
- Recharge the battery with only a manufacturer-specified charger.
- If an employee is using a ladder, employees should lay the cordless drill on its side when not in use.



Pressure Washers

Policy

Pressure washers operate at pressures from 1,000 to 5,000 psi, meaning that they are capable of causing serious property damage and personal injury. To avoid this, be sure to be smart and follow the proper procedures when using pressure washers.

- Only use chemicals approved for use with that specific pressure washer
- Check the engine oil level every time you use the washer
- Check the parts of the safety washer to make sure they are in good shape and properly connected
- Never refuel a hot or running engine
- Wait at least two minutes after it is turned off before refilling
- Be sure electric pressure washers are properly connected and grounded
- Identify and know how to operate emergency fuel cut offs
- In winter:
 - Store the pump in a warm area
 - Use compressed air to release the remaining fluid
- Connect and turn on the water supply before you turn on the pressure washer
- Set the trigger safety lock when the gun valve is not in use
- Be aware of the location of electricity sources such as power lines and fuse boxes and keep the water away from them
- Get used to the pressure washer
- Begin with the spray far away from the surface and gradually find the right distance for cleaning-to close may destroy the surface being cleaned
- Be aware that the washer may "jump" when it is first turned on
- Do not exceed the manufacturer's safe operating pressures for hoses, valves, and other fittings
- Never leave the unit unattended
- Try not to use gasoline-powered washers inside; if you must use them inside, be sure the area is well ventilated to avoid carbon monoxide poisoning
- Never point the gun at yourself or another person
- Personal Safety
 - Wear safety goggles or face shields when operating a pressure washer
 - Wear ear protection to prevent hearing loss
 - The pressure can cause loss of balance
 - Use an extension like a spray arm to help clean areas that are out of reach
 - Never wear open toed shoes



• Never attempt to rinse off any part of your body with the water jet; it can easily penetrate skin

Preventing Injuries from Falling Objects

Policy

Falling objects can cause injuries and death, not only for workers but for the general public as well. In order to prevent these types of injuries and fatalities, remember the following tips.

Safe Work Practices

PROPERLY TRANSPORTING THE LOAD

- If possible, transport loads at times when fewer people are present
- Have a spotter in place to tell you where it is safe to move and swing the load
- Never assume other people can see you or your loads
- Do not stack loads too high
 - Stack loads to prevent sliding, falling, or collapse
- If bad weather increases the danger for transportation, focus on another project until you can transport the load safely

KEEPING YOUR WORKSPACE SAFE

- Do not leave loose items or tools on window ledges, shelves, cranes, or working platforms
 - o Stack them on a flat surface or a safe, designated storage place
 - If necessary, cross tie or cover them to keep them in place
- Use close boarded platforms or toe boards so it is more difficult for anything on the platform to fall over the edge
- Use tool and material lanyards
- Use canopies or nets to catch falling items
- Never throw materials or tools
 - Use lanyards or buckets to transport tools up and down
- Clean up debris immediately
- Report any loose supports or platforms to your supervisor

SAFETY ON THE GROUND

Although workers above will try hard to make sure that nothing falls, workers on the ground have a responsibility to be safe as well.

- Wear Personal Protective Equipment
 - Hard hats
 - Safety boots
- Do not walk under loads
- Follow warning signs and do not go into areas that are off-limits
- Be alert at all times



Propane Safety

Policy

Propane, also known as liquid petroleum gas or LPG, is a trusted and reliable energy source. Many industrial vehicles use propane. Additionally, propane is used as a propellant for aerosol cans. Propane is a very useful gas in the workplace and in our homes. However, because of its chemical nature and flammability as a gas, it can, under certain circumstances, pose a safety risk.

Safe Work Practices

SPILLS OR LEAKS

- Eliminate all ignition sources.
- Ground all equipment used.
- Do not touch or walk through the spilled material.
- Have a qualified person stop the leak. Do not risk if you are not qualified!
- If possible, turn leaking containers so that the gas escapes rather than liquid.
- Use water spray to reduce vapors or divert vapor cloud draft. Avoid allowing water runoff to contact with the spilled material
- Do not direct water at spill or source of leak.
- Prevent spreading of vapors through sewers, ventilation systems and confined areas. Do not risk if you are not qualified!
- Isolate area until gas has dispersed.

FIRST-AID

- Call 911 if someone is overcome by fumes, burned or hurt.
- Move victim to fresh air if they are not physically hurt. If physically hurt, make sure the victim can be moved safely without causing more injury.
- Remove and isolate contaminated clothing and shoes.
- In case of physical contact with liquefied gas, thaw injured parts with lukewarm water.
- Keep victim warm and quiet.



Properly Placing Sandbags

Policy

Sandbags can be great barriers when it comes to protecting buildings and property from flood damage. By following the safe work practices provided in this lesson, employees can help minimize their chances of an injury occurring when placing sandbags.

Safe Work Practices

Before placing sandbags, employees should do the following:

- Check the weather forecast and wear the appropriate clothing for the day's predicated weather.
- Inspect and ensure that all radios and any other devices that are being used for weather monitoring are working. Report damaged radios and other devices to your supervisor.
- Ensure that all sandbags have been properly filled and inspect all bags for damage. Report damaged bags to your supervisor.
- It is recommended that employees stretch before lifting.

NOTE: Employees should employ extreme caution when sandbagging in areas that have been hit with floodwaters. Floodwaters can hide many dangers, so employees should do their best to avoid walking in floodwater whenever possible. If walking in floodwaters cannot be avoided, employees should be on the lookout for debris and other potential dangers that could be hidden in deep water.

NOTE: It is recommended that sandbags only be filled from $\frac{1}{2}$ to $\frac{2}{3}$ full, as a fully filled bag can weigh over 30 pounds.

When placing sandbags, employees should do the following:

- Do NOT attempt to lift a bag that is too heavy for you.
- Use proper ergonomics when lifting and moving sandbags.
 - Note: Employees can drag heavier bags if they are not moving it more than a few feet.
- When possible, employees should use equipment such as pallets and forklifts to move large loads
 of sandbags to the area where the sandbags are to be laid.
- Employees should handle burlap bags with care as the material could cause minor scrapes to the hands.
- Be aware of the placement of everyone's fingers when placing bags.



Push and Pull Safety

Policy

The pushing or pulling of equipment and objects occurs in many different industries. Employees that push or pull equipment or objects could potentially be exposed to harm. Following the safe work practices presented in this lesson will help ensure employee safety.

Safe Work Practices

Before employees go to move equipment, they should remember the following:

- Plan your path of travel.
- Ensure that the path you have chosen is free of debris and obstruction.
- Do NOT use paths that have slippery surfaces.
- Use transport devices such as hand carts, pallet jacks, or forklift if putting something into the back of a truck.
- Always push over pulling when possible, using your body weight can help prevent injury.
- Do Not stack on carts over eye level.
- Limit the weight of a load to 50 pounds. Anything over 50 pounds should either be team lifted or lifted with a mechanical assistant.
- Don't be afraid to ask for help when needed.
- Remember the greater the load, the greater risk of injury.
- Know your own limits.
- Keep a good pace, don't try to move to fast which can lead to injury.
- Stay close to the item you are moving and keep your back straight.

Note: If an employee chooses to use a back brace, they should be properly trained in its use and proper lifting techniques.



Radio Frequency Hazards

Policy

Radio frequency radiation (RF) is a part of the electromagnetic spectrum that is not visible to the human eye but can potentially cause damage. Employees exposed to RF radiation must be aware of the risk associated with it and the safe work practices that they can utilize to reduce that risk.

- The amount of radiofrequency that employees are exposed to should be tested regularly by someone who is authorized to do so.
- If provided, employees working on any site whose task brings them within 10 feet of an antenna shall wear a personal monitoring device to determine the amount of exposure. Leave the area immediately if the level of exposure reaches dangerous levels.
- Work as if all antennas are active and emitting RF.
- Only those who are authorized to do maintenance shall install or repair any part of antennas.
- Any tools unnecessary for the task should be removed to prevent contact with energized metals.
- Care should be taken to prevent anyone from being in a direct beam of RF while it is activated.
- Fall protection must be worn when climbing towers.
- Personal protective equipment when exposure can't be reduced is recommended. This may include RF protective suits, head and eye protection, insulated gloves, or rubber soled shoes.
- Length of exposure should be kept as short as reasonably possible.
- Equipment that is sensitive to radio frequency radiation (such as control panels), should not be installed near sources of radiation.
- Metallic structures should be electrically grounded or insulated.



Railroads: Safely Working Near Railroad Tracks

Policy

All over the country there are miles upon miles of railroad tracks. Depending on the area and industry, employees may be required to conduct work near railroad tracks. Working near railroad tracks can potentially expose employees to harm. Following the safe work practices presented in this lesson will help ensure employee safety.

Safe Work Practices

Before going to work near the tracks, employees should do the following:

- Tie back long hair and remove all jewelry.
- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Wear clothing that will be appropriate for the day's weather.
- Ensure that everyone on the team is aware of their responsibilities for the day.
- Inspect all tools and equipment before getting on site. Report damaged or malfunctioning tools and equipment to your supervisor. Do NOT use or operate damaged tools and equipment.

When working near railroad tracks, employees should do the following:

- Stay alert and listen for bells, horns, or other signs that a train may be approaching.
- Unless otherwise notified, treat all tracks as if a train will be on the tracks.
- Follow all instructions that are given by the employee in charge or roadway worker in charge. Additionally, employees should follow any instructions that are given by the watchman or lookout.
- Stay at specified distances from tracks when work is not being directly done on the tracks.
 - Most tracks require between 15-25 feet distance from tracks. The railroad company and any local departments should inform contractors ahead of time of specified distances that will help keep employees safe while working near the tracks.
- Ensure that all equipment procedures are followed.
- Be aware that any on-track equipment could move at any time.
- Use all tools and equipment in accordance with the manufacturer's instructions.
- When required, ensure that all lockout/tagout procedures are followed.

To avoid accidents, employees should NOT do the following when working near railroad tracks:

- Do NOT foul the tracks. Employees should not walk on or place tools and equipment on the tracks, unless the tracks are being worked on. Employees or tools and equipment that are on the tracks could be struck by a train resulting in an accident.
- Do NOT ignore alarms, horns, signals, or instructions.



- Do NOT stand next to the tracks when a train approaches your location. When a train approaches, employees should move a safe distance away from the tracks to avoid accidental contact which could result in bodily harm.
- Do NOT walk in front of or behind a train. Train operators have limited vision in both the front and rear of the train and could hit unseen employees.
- Do NOT assume that once a train has passed that is safe to approach the tracks. There could be
 multiple trains on the same track, or if there are two sets have tracks, have two or more trains
 coming in alternate directions. Employees should only resume work when they have been notified
 by designated employees that it is safe to do so.



Rainy Conditions

Policy

Rain can be an unanticipated danger in many worksites, and it is important that employees are aware of general safe practices when working in or around the rain.

- Employees should move cautiously. The weather may tempt you to work more quickly than normal to get out of the rain, but this can be dangerous. The rain causes slick surfaces, so you must work slowly and deliberately especially when climbing ladders!
- All tools should have textured or non-slip handles when working in high moisture conditions. Never use electrical tools or equipment not rated for outdoor use when working in the rain.
- Protective footwear with deep treads for traction should be worn to prevent slipping. Be sure to cover your boots or shoes with your pant legs instead of tucking them in.
- Wear layers when you will be working out in the rain for extended periods. Be certain that your coat is well-ventilated and does not restrict movement so it can be worn comfortably.
- When using hand protection, choose gloves with strong, slip-proof grips. Gloves should be sufficiently tight and long enough to be covered by your coat sleeves.
- If you wear glasses or goggles, it is important to use anti-fog spray or wipes on them before going outside. Hoods or hats can be used to keep rain out of your eyes.
- It is especially important during bad weather to make sure work areas are adequately lit.
- High visibility clothing must be worn in areas with heavy machinery or traffic.
- For those that are required to drive at work, it is vitally important to avoid accidents by:
 - Keeping both hands on the steering wheel at all times.
 - Turning on your headlights not only for your visibility, but so that other drivers can see you.
 - o Keeping at least five car lengths of space in between you and the car ahead of you.
 - Driving at or BELOW the speed limit, because your traction is reduced in bad weather.
 - Avoiding flooded roads and standing water, if possible.



Ramp and Runway Safety

Policy

Ramps and runways can offer alternative ways to access areas of a construction site. To help ensure employee safety, ramps and runways should meet certain requirements.

Safe Work Practices

When ramps and/or runways are provided for employee access, they should meet the following requirements:

- Ramps and/or runways that are erected for use should be no less than 20 inches in width.
- Ramps and runways should be secured and supported as to avoid deflection and springing action.
- Inclined runaways sloped two feet in 10 feet or more should have securely fastened cleats or other
 means to improve footing. When cleats are used, they should be eight inches or more in length and
 no more than 16 inches apart.
- Planks that are used for raised walkways, runways, or sidewalks should be secured against displacement.
- Planks should be uniform in thickness and all exposed ends should be provided with beveled cleats as to prevent tripping.



Ratchet Strap Operation and Safety

Policy

Proper application, removal, and care of your ratchet tie-down straps will help them to be as effective as possible. Take care of your straps according to the manufacturer's recommendations as well as the tips included in this lesson – and at the same time, dispose of them as soon as they show any signs of damage.

- Applying the straps
 - Attach the hook to a secure anchor point.
 - o Guide webbing across the cargo, making sure there is no twisting over the load.
 - Attach the hook with ratchet mechanism onto the opposite side anchor point.
 - Making sure that the loose end is on top, thread webbing through the center slot of the spindle.
 - Pull the strap to remove most of the slack, but not so tight that it damages the cargo.
 - Crank the ratchet handle back and forth to tighten the strap until there is sufficient tension.
 - Close the ratchet handle completely to lock it in place.
 - Secure the extra webbing so that it does not come loose in the wind.
 - Before driving, check all tie-downs to make sure they are adequately secure.
 - It is recommended to check all of the tie-downs again after 20-30 miles of driving.
- Removing the straps
 - Pull and hold the release handle while lifting the grip to release.
 - Open the ratchet mechanism completely.
 - Pull the loose webbing free from the device.
 - Release the hooks from their anchor points.
- Additional tips
 - Practice applying and removing the ratchet tie-down straps before transporting the load.
 - Edge protectors may be necessary to keep the webbed straps free from damage.
 - Make sure the tie-down straps are clean and dry before storing.
 - Do not store the ratchet straps in direct sunlight.
 - To clean, scrub with water and a mild detergent without any bleach additives. Hang to air dry.
 - Broken stitching, burns, stiff, or unevenly worn tie-down straps are signs that the strap needs to be replaced.



Rattlesnakes in California

Policy

Rattlesnakes can cause serious injury to humans on rare occasions. The California Poison Control Center notes that rattlesnakes account for more than 800 bites each year with one to two deaths. Most bites occur between the months of April and October when snakes and humans are most active outdoors. About 25 percent of the bites are "dry," meaning no venom was injected, but the bites still require medical treatment.

- Do not step or put your hands where you cannot see. Step ON logs and rocks, never over them.
 Check out stumps or logs before sitting down.
- Be careful when stepping over the doorstep as well. Snakes like to crawl along the edge of buildings where they are protected on one side.
- Do not handle a freshly killed snake, it can still inject venom.
- Stay calm
- Wash the bite area gently with soap and water
- Remove watches, rings, etc., which may constrict swelling
- Immobilize the affected area
- Transport safely to the nearest medical facility



Reach Truck Safety

Policy

Reach trucks serve a great purpose in many industries, but can also be extremely dangerous if they are not properly operated. Employees following good safe work practices and being are of their surroundings are paramount to safely operating a reach truck.

- Always use the roof rail and the step when getting on or off the reach truck.
- Passengers should never be allowed on the reach truck.
- Keep all body parts in the vehicle while driving.
- Always make sure that nobody is walking or standing under the forks.
- Watch out for people in the work area, especially those on foot that may cross your path.
- Only lift people with certified accessories, like a cage.
- Make sure to position the load carefully on the shelves.
- Never drive with the load excessively raised, keep it at a low and safe level.
- Always use the horn to alert others especially when:
 - Crossing aisles
 - Turning corners
 - Backing-up
- Always turn off the truck before leaving it.
- Only handle loads that are properly secured.



Rebar Cutter/Bender Safety

Policy

A rebar cutter/bender is a tool widely used in building and construction. Working around rebar can be very dangerous but the risk of danger can increase while cutting rebar. There is always a chance that pieces of rebar can be "shot off" at high speeds, causing serious injury or death. These safe work practices have been established to ensure employee and bystander safety.

- The work area should be kept clean and be well lit at all times.
- Bystanders should be kept away while employees are operating the cutter/bender.
- Any and all distractions should be avoided.
- Do not operate in areas where there is any danger of explosions occurring.
- Keep hands, feet and other body parts away from the cutting area.
- Employees should stay alert and be aware of their surroundings.
- Employees should make use of all available safety equipment, this includes, but is not limited, to:
 - Eye Protection
 - Dust masks
 - No skid shoes
 - Hard hat
 - Hearing Protection
- Employees should ensure the switch is in the off position before plugging in to avoid accidental starting.
- Keep proper footing and balance at all times, do not overreach.
- Only use this tool for its intended purpose.
- Do not force the tool, the tool will do the job better at the rate is was designed.
- Do not use the tool if there is a faulty power switch.
- Disconnect from the power source or battery pack when performing maintenance on the tool.
- Do not expose the tool to rainy or wet conditions due to a risk of electric shock.
- Do not carry the tool by the cord, as this can cause damage and increase the risk of electric shock.
- Cutting tools should be kept sharp and clean.



Rebar Safety

Policy

Rebar, short for reinforcing bars, are steel rods used in concrete. Rebar often causes injuries because they jut out of concrete and can cause cuts, scrapes, falls, and even impalement. Therefore, when you work with rebar, remember these safety tips.

- Watch where you're going and be aware of your surroundings so you do not trip on the rebar
- Consider wearing work gloves when handling rebar so you do not scrape your hands
- Practice proper lifting techniques so you do not strain your back while transporting rebar
- Wear eye protection and gloves when you are bending rebar, and be very careful with the equipment



Reciprocating Saw Safety

Policy

A reciprocal saw, sometimes known as a sawzall, has a blade that cuts by moving back and forth through the workpiece. It is used by plumbers, electricians, and others who work in construction. Because it's a power tool, it makes sawing projects go a lot quicker; however, it also means that the reciprocating saw can be more dangerous. Therefore, it is important to remember the following safety tips.

- Choose the correct blade
 - Using an incorrect blade could cause binding, which could cause operator injury
 - Generally you should use coarser blades for wood and finer blades for metal
- Read the operator's manual and all of the instructions
- Remove all jewelry that could get caught in the reciprocating saw
- Roll up or tie back loose clothing that could get caught in the saw
- Make sure your workspace is clear and well lit
 - Cluttered and dark areas cause accidents
- If you are using an extension cord to power the reciprocating saw:
 - Be sure it is strong enough for the power needed
 - Be careful not to trip over or tangle the extension cord
- Inspect the saw before you begin using it
 - Make sure nothing is cracked, broken, or frayed
- Wear the proper personal protective equipment
 - Ear Protection
 - Eye Protection
 - Consider a respirator to prevent you from breathing in dangerous fibers from the workpiece, such as lead paint, crystalline silica from bricks and cement or arsenic from treated lumber
- Do not use the reciprocating saw if you are under the influence of drugs, medicine, or alcohol
- Do not smoke while using the saw; nicotine reduces the blood supply to the hands and fingers, which increases the risk of vibration related injury
- Use clamps to hold the workpiece steady so it does not slip and cause you to lose control of the saw
- Keep your hands clear of the saw
- Pay attention to what you are doing, but be aware of your surroundings
- Hold the saw by its insulated gripping surfaces, so if the saw comes into contact with a wire, you will be protected from the shock
- Never force the reciprocating saw through a cut: let the saw do the work
- Do not lay down the reciprocating saw while it is still moving
- Do not leave the saw unattended while it is still plugged in



- Do not yank the cord out of the wall
- Never carry the saw by the cord
- Make sure all safety labels and warnings are still attached
 - Replace them if they have been taken off or if they are no longer readable
- Do not expose them to rain or wet conditions
- Keep the blades sharp so they will be less likely to bind and easier to control
- If you are using a battery powered reciprocating saw, only charge it with an approved charger to avoid electric shocks or fires
- Do not use powerful chemicals to clean your saw
- Always unplug or disconnect the battery when performing maintenance on the saw



Reporting Work-Related Injury and Illness

Policy

When an injury or illness occurs at the workplace, an employee needs to report it. Even a minor injury should be reported. Some employees may think that minor things, such as a paper cut, do not need to be reported; after all they can just put a band aid on it and return to work. However, employees need to remember that even paper cuts can get infected. Both you and your supervisor want you to be able to work and part of that includes getting injuries and illnesses treated and reported.

Safe Work Practices

Employees should always follow their company's specific procedures for reporting injuries and illnesses that occur at work. Injuries and illnesses should be reported immediately or as soon as possible. When reporting an injury or illness, an employee should do the following:

- Report the injury or symptoms immediately (or as soon as possible if you are seeking medical treatment) to your supervisor or designated person.
- Give details about the injury or symptoms. Details include:
 - Date
 - Time
 - Description of the work area and activities being performed
 - The names of eyewitnesses or coworkers who aided the employee
 - Symptoms (if applicable)

Note: If possible, give an estimated time of when symptoms first appeared.

- Fill out any forms that relate to the reporting of a work-related injury or illness.
 - Depending on the situation, your employer may give you a form for your medical provider or other medical professional to fill out. Return this form as soon as possible to your supervisor or designated person.
- Keep your supervisor or designated person up-to-date on any ongoing medical treatment or accommodations that you are receiving or will need.



Respirators: Air Purifying

Policy

Air-purifying respirators (APRs) have filters, cartridges, or canisters that are used against particulates, gases, and vapors that are at atmospheric concentrations less than immediately dangerous to life and health (IDLH). Employees who use respirators properly are better equipped to work safely in their work area.

- Do not use respirator unless trained and aware of uses and limitations.
- Make sure the right filter, cartridge or canister is selected before use.
- Inspect respirators and filter, cartridge, or canister before and after use.
- Respirators should be cleaned, maintained, and stored as recommended by the manufacturer.
- If a respirator impairs one's ability to see, hear communication or move as necessary, report it to a supervisor immediately.
- Facial hair is prohibited when using respirators that require a tight seal of the respirator to the face.
- Select a different respirator if the fit of the respirator is unacceptable.
- If an employee experiences breathing difficulty while wearing respirator, leave the work area immediately, remove respirator and report the difficulty to supervisor.
- Prior to voluntary use of respirator, employees are required to have the following completed:
 - Medical evaluation.
 - Fit testing.
 - Review of Appendix D.



Respirators: Dust (Nuisance) Masks

Policy

Dust masks are used in a variety of applications including mowing, gardening, sweeping and dusting. Their purpose is to provide protection against nuisance dust only and is used for employee comfort.

- Prior to use of dust (nuisance) masks, employees should review the contents of Appendix D.
- Do not wear dust masks in environments which require the use of particulate (filtering facepiece) respirators.
- Ensure that the use of dust (nuisance) masks does not create a hazard in itself.
- Heed all instructions regarding the dust (nuisance) mask limitations.
- Employees should not share dust (nuisance) masks.
- Keep track of your dust (nuisance) mask so that you do not mistakenly use someone else's.
- Replace dust (nuisance) masks daily or when they become soiled, damp or contaminated in any way.
- Discontinue use if breathing becomes impaired.



Respirators: Particulate

Policy

Particulate respirators are the simplest, least expensive, and least protective of the respirator types available. These respirators only provide a filter barrier to dusts, mists, fumes, and fibers. The commonly known

- Inspect all respirators for wear and tear before and after each use, giving special attention to rubber or plastic parts that may deteriorate or lose pliability.
- Respirators should be used and maintained as recommended by the manufacturer.
- Replace when respirator becomes discolored, damaged, or clogged.
- Do not use for protection against gases, vapors, or oxygen deficiency.
- Only use NIOSH approved and labeled respirators.
- Select a different respirator if the fit of the respirator is unacceptable.
- The following criteria should be used to help determine the adequacy of the respirator fit:
 - Chin properly placed;
 - Adequate strap tension (not overly tightened);
 - Fit across nose bridge;
 - Respirator of proper size to span distance from nose to chin;
 - Tendency of respirator to slip; and
 - Self-observation in mirror to evaluate fit and respirator position.
- If an employee experiences breathing difficulty while wearing respirator, leave the work area immediately, remove respirator and report the difficulty to supervisor.
- Prior to voluntary use of this respirator, employees are required to have the following completed:
 - Medical evaluation.
 - Fit testing.
 - Review of Appendix D.



Respirators: Supplied Air

Policy

Supplied air respirators (SARs), also known as atmosphere-supplying respirators, supply clean air directly to the user from a source other than the air surrounding the user. The respirator may be connected to a large, stationary air supply tank via a long hose or may be equipped with a small portable air tank that is worn on the body. Equipping employees with the knowledge to adequately perform their job duties while wearing respirators is crucial to ensuring their safety.

- Inspect all respirators for wear and tear before and after each use, giving special attention to rubber or plastic parts that may deteriorate or lose pliability.
- Respirators should be cleaned, maintained, and stored as recommended by the manufacturer.
- If a respirator impairs one's ability to see, hear communication or move as necessary, report it to a supervisor immediately.
- Use the lightest respirator possible that presents the least breathing resistance.
- Facial hair is prohibited when using respirators that require a tight seal of the respirator to the face.
- Select a different respirator if the fit of the respirator is unacceptable.
- The following criteria should be used to help determine the adequacy of the respirator fit:
 - Chin properly placed;
 - Adequate strap tension (not overly tightened);
 - Fit across nose bridge;
 - Respirator of proper size to span distance from nose to chin;
 - Tendency of respirator to slip; and
 - Self-observation in mirror to evaluate fit and respirator position.
- If an employee experiences breathing difficulty while wearing respirator, leave the work area immediately, remove respirator and report the difficulty to supervisor.
- Prior to voluntary use of this respirator, employees are required to have the following completed:
 - Medical evaluation.
 - Fit testing.
 - Review of Appendix D.



Responding to an Active Shooter Incident

Policy

An active shooting, or mass casualty incident, is when there is an individual or individuals that are armed and attempting to kill at random in a populated area. While there is no way to predict when an active shooting will happen, all employees must know the safe steps of action that can be taken in the unfortunate event that one should occur because you never know if your workplace will be targeted.

- The best and safest option is to run if you have access to an escape route.
 - If you feel like evacuating is the safest option, you should do so even if nobody goes with you.
 - o Do not take the time to gather your belongings before leaving.
 - If you notice somebody who needs assistance, you should stop to help them on your way.
 - o Once you are outside, warn others from entering the active shooting zone.
 - Call 911 once you are in a safe, secure location. Knowing details such as how many shooters
 there are and about how many injured persons are on the scene will help the dispatcher know
 what to expect upon arriving at the scene.
- When evacuation is not possible, the second best option is to hide.
 - If you decide to hide, quickly and quietly find a safe location.
 - Secure your hiding place the best you can by locking or blockading the door.
 - Turn off all lights, silence your cell phone, and remain calm while hiding.
 - Ideally, your hiding place should provide protection if shots are fired in your direction, be out
 of the shooters view, and should not restrict your options for movement.
- If running or hiding are not options, fighting can become a last resort. However, this can make the situation even more dangerous and should not be considered over the safer options previously mentioned. If you have no other choice, follow the guidelines below:
 - Improvise weapons out of heavy objects around the room.
 - Attack in a group, if possible.
 - Fully commit to your actions and be aggressive in your attempts to incapacitate the shooter.
- Throughout the ordeal you should be aware of your environment and always have an exit plan in mind. Once first responders are on the scene, remember:
 - First responders are there to stop the shooter NOT to assist the injured.
 - Remain calm and follow ALL instructions given to you by law enforcement.
 - Keep your hands visible and avoid pointing or shouting.
 - Throughout the incident (and on a regular basis) you should pay attention to your surroundings in order to be a good witness and give a detailed description of the events.



Rigging Safety

Policy

Employees who work with rigging must understand its maximum load capacity, proper care and storage, and splicing guidelines to make sure it stays in top condition. Rigging that has been handled improperly may cause serious damage and injury if it fails while hoisting a load.

Safe Work Practices

PROPER USE AND CARE

- Visually inspect rigging for defects before working, and never use any rigging that may cause a hazard. Things to watch out for may include:
 - Abnormal wear.
 - Powdered fiber between strands.
 - Broken or cut fibers.
 - Variations in the size or roundness of strands.
 - Discoloration or rotting.
 - Distortion of hardware in the sling.
- Rigging equipment must have permanent and legible identification markings that indicate the recommended maximum load capacity.
- Rigging must not be loaded beyond its maximum load capacity, except for test purposes.
- All components of rigging must be free from any kinks or twists before use.
- Make sure there are no lines or components twisted around each other.
- After use, rigging must be stored so as not to become an entanglement hazard for other employees and where they will be safe from moisture, chemicals, or excess heat.

SPLICING

- In manila rope, eye splices should contain at least three full tucks, and short splices should contain at least six full tucks (three on each side of the center line of the splice).
- In synthetic fiber rope, eye splices should contain at least four full tucks, and short splices should contain at least eight full tucks (four on each side of the center line of the splice).
- For all eye splices, the eye must be sufficiently large to provide an included angle no greater than 60 degrees at the splice when the eye is placed over the load or support.
- Employees must never use knots in place of splices.
- Clamps that are not designed specifically for the type of rigging used must not be used for splicing.



Road Rage

Policy

The vast majority of road rage incidents can be easily prevented if cooler heads are allowed to prevail. Mistakes are made by everybody while driving, and you cannot control the way other people act while they are driving. It is up to each individual to control their own anger and to avoid conflict.

- Do's
 - Do realize that the other driver is probably just as frustrated as you are.
 - Do use positive open handed gesture such as waving (the five finger type)
 - Do say or behave as if apologizing, especially if you are in the wrong.
 - Do be aware of the precursors and triggers that affect you.
 - Do remember to limit the amount of caffeine that you drink. Excessive caffeine can alter your character.
 - Do stay safe and alive for family and friends.
- Don'ts
 - Don't respond in an aggressive manner.
 - Don't escalate the situation.
 - Don't make eye contact with an aggressive driver.
 - Don't get in somebody's face (think of how you would react if somebody were to do that to you)
 - Do not stop the vehicle
 - Don't get out of the vehicle to have a verbal or physical confrontation for ANY reason as this
 could lead to a potentially violent confrontation.



Robbery Prevention

Policy

Robberies are crimes of opportunity. By acting professional and being aware of their surroundings, employees can help minimize their chances of a robbery occurring. However, robberies cannot be 100% prevented. To protect themselves from harm, employees should not be heroes and do as the robbers instruct. Money and property can be replaced; your life cannot.

Safe Work Practices

Employees should remember that robbers want to get in and out when performing their crime. To help protect themselves from harm, employees should do the following when experiencing a robbery:

- DO NOT BE A HERO!
- Stay calm and comply with demands. Do NOT delay or resist. Your safety is more important than the money. Do NOT do more than what is asked of you.
- Keep hands where the robber can see them. Do NOT attempt to hit any alarm buttons.
- Do NOT look the robber in the eye.
- Inform the robber of anyone who is in the back or who is coming in. Robbers do not like to be surprised.
- Do NOT make sudden or quick moves. Tell the robber in advance of the moves you are going to make
- Be observant of the robber's identity. Notice tattoos, facial hair, clothing, or other distinguishing marks.
- Do NOT block the robber's escape route.
- Notify the police and your manager when it is safe to do so.
- Do NOT touch or remove anything from the crime scene. Preserve the crime scene until the police arrive. Remember, anything that the robber touched has the potential for fingerprints that could help identify the robber.
- Give aid to any other victims.
- Lock all doors and stop doing business until the police arrive.
- Write down everything you can about the robber(s):
 - Age
 - Sex
 - Gender
 - Race
 - Estimated height
 - Type of clothing worn by the robber(s)
 - Identifying marks
 - Type of weapon used



- Ask witnesses to stay. If they can't or won't, ask them to provide contact information. Give the contact information to the police.
- Follow all directions given by the police. Provide as much information as you can to the police.



Rotary Hammer Drill

Policy

Rotary hammer drills are powerful tools used to do big jobs fast. They have interchangeable drill bits that can do a variety of jobs, and can be used in a number of different applications. A powerful tool like this is more than capable of becoming a serious safety hazard, and you must control that risk by following all of the safety guidelines.

- General safety rules
 - Do not use any rotary hammer drill with visibly damaged cords, guards, or any other part.
 - o Do not use an electric rotary hammer drill in the rain or other wet locations.
 - It is always better to operate the rotary hammer drill with two handles for better control and leverage. If you have a second handle available to you, make sure it is installed.
 - You may get the best leverage out of the front handle by rotating it to a more desirable position.
 - Any employee using the tool or in the vicinity of the drilling operation should wear hearing protection and safety glasses or goggles.
 - Dust masks must also be worn in dusty areas where drilling is taking place.
- Drill bits
 - Always use the right drill bit for the job as recommended by the manufacturer.
 - When changing drill bits, do not use a wrench or screw driver in place of the chuck key to tighten/loosen the drill bit.
 - Unplug the tool from the power source before handling, adjusting, or switching out drill bits.
 - Apply pressure when drilling concrete, or damage will occur as the bit is allowed to spin in the hole without cutting.
 - Do not attempt to drill through concrete with steel reinforcing rods they will damage the tip
 of the drill bits.



Safety Signs

Policy

Signs are never a substitute for good safety procedures and training, they are useful to remind us of hazards and ways we can protect against them. Always take seriously the information on a sign whether in the workplace or on the road. You can prevent injuries and save lives if you understand the signs and the hazard they are warning about.

- Danger Signs
 - Red and black with white field
 - o Indicate an immediate hazardous situation which could result in severe injury or death
- Warning Signs
 - Orange with black lettering
 - Indicate a potentially hazardous situation which could result in severe injury or death
- Caution Signs
 - Yellow with black lettering
 - Indicate a hazardous situation which may result in a moderate injury
- Notice Signs
 - Blue and white
 - Indicate company policies relating to the safety of personnel or protection of the property
- Safety First Signs
 - Green and white
 - Indicate general safety instructions as respect to safe working conditions
- Special Safety Signs
 - Various colors depending on the sign and are usually signs for biological hazards and radiation hazards
 - Alerts us to the present or potential presence of blood or other biological hazards
- Safety Instruction Signs
 - Green and white
 - Remind you to report accidents, help locate first-aid equipment and direct you along an evacuation route



Safety Vests

Policy

In order to avoid accidents due to low visibility, wear the correct safety vest for each task as mandated by the ANSI.

- Class 1 safety vests are good for workers in controlled environments, such as loading docks and parking lots- basically for people who work around traffic that is travelling 25 mph or less. Class 1 safety vests should have at least 155 square inches of reflective material. Examples of workers who wear Class 1 safety vests are:
 - Parking attendants
 - Warehouse personnel
 - People who get shopping carts from parking lots
- Class 2 safety vests are for people who work near traffic that goes faster than 25 mph and who
 won't be devoting their full attention to the traffic. Class 2 safety vests should have at least 201
 square inches of reflective material. Examples of workers who need to wear Class 2 safety vest
 are:
 - Forestry Workers
 - Law Enforcement Personnel
 - School Crossing Guards
 - Airport Baggage Handlers & Ground Crew
 - Parking and Toll Gate Personnel
- Class 3 safety vests are for workers who deal with traffic traveling at speeds of 50 mph or higher
 and who work in all manner of weather. Class 3 safety vests are for workers who face serious
 hazards or whose task load requires a shift of attention away from their work. The enhanced
 visibility must be on the chest, back, arms and possibly legs. Class 3 safety vests should have at
 least 310 square inches of reflective material. Examples of workers who need to wear Class 3
 safety vests are:
 - Accident Site Investigators
 - Emergency Responders
 - Railway Workers
 - Utility Workers
 - Survey & Flagging Crews



Safety in a Power Outage

Policy

Power outages are extremely inconvenient in a work setting and can create many potential hazards. Following company guidelines and these safe work practices will help to ensure the safety of every employee.

- Employees should know how to open and close any electric security gates.
- Become familiar with and follow the procedures of the emergency action plan.
- Electrically powered equipment that was in operation before power outage, should be shut off.
- Heat producing equipment should be shut off to prevent fire hazards.
- Keep clear of points of operation on machinery, in case power unexpectedly coms back on.
- Equipment should be turned back on in stages to avoid straining the system.
- Elevators should be avoided, stairs should be used instead.
- Keep the doors closed on any refrigeration equipment to avoid spoilage.
 - o Dry ice may be used (if available to keep food items cool, use gloves while handling dry ice.
- If leaving the grounds, use extreme caution while driving, this is applicable if other parts of the city are experiencing a power outage as well.
- Do not call 9-1-1 to report the outage, the utility company should be called instead.



Seat Belt Safety

Policy

The law requires that you wear your seat belt. Seat belts protect people from needless death and injury. But whether it is because they are in a hurry, distracted, or they simply forget, many people don't wear their seat belts, and thousands die as a result. Therefore, it is important to remember to buckle up, even when traveling short distances.

- Keep your seat belts in good condition
- Be sure to alert your employer if the seat belt is too worn or old. Wearing a seat belt is pointless if it's so worn it doesn't work.
- Wear the seat belts correctly
- Always buckle up before driving or riding in a vehicle. This goes for everyone in the vehicle, whether
 you're sitting in the front or the back.
- Wear the lap belt low across the hips and below your stomach.
- Wear the shoulder belt over your collarbone, away from your neck. It should cross over your chest.



Securing Ladders

Policy

Falls from ladders can be easily prevented with adherence to safe work practices and proper training. Proper placement, inspection and securing of ladders are also key factors in safety and fall prevention.

Safe Work Practices

SETUP

During set up the footing should be:

- Kept level by digging out the ground or using ladder levelers.
- On hard ground the feet of the ladder should be rested flat and free of debris.
- On grass or soft ground the feet could be flipped up and the spiked ends driven into the ground.
- The ladder should be positioned at a 75-degree angle.
- Secure the base of the ladder to prevent accidental movement by using one or more of the following:
 - Using a ladder with non-slip feet.
 - Nail a cleat to the floor.
 - Anchoring the ladder at the base with a strap or rope.

SECURING METHODS

- Using a cleat- Installing a cleat behind the feet of the ladder can prevent the ladder from slipping.
- Using a ladder stabilizer- This is especially essential when working around large windows.
- Tie off the ladder top- This can be done by attaching eye screws to a 2x4, then attaching the 2x4 to the fascia. Tie the ladder to the eye screws to avoid the top of the ladder slipping.

OSHA REQUIREMENTS

- A metal spreader or locking device should be provided on each stepladder to hold the front and back sections in an open position when the ladder is being used.
- Ladders should be used only on stable and level surfaces unless secured to prevent accidental displacement.
- Ladders should not be used on slippery surfaces unless secured or provided with slip-resistant feet to prevent accidental displacement.
- Extension ladders should always extend 3 feet above the point of contact when a person could potentially be walking on the surface.



Security Guard Safety

Policy

A security guard's job can be very dangerous at times but steps can be taken to ensure safety. Safety is always first! Being aware of your surroundings and following these safe work practices should help to ensure a safe work environment. Remember, you can't protect others unless you protect yourself first.

- Security guards should never become complacent. Watching hours of video monitor footage and patrolling the same area can become tedious.
- A security guard must know how to respond to dangerous situations.
- A security guard must be able to effectively diffuse potentially dangerous or life threatening situations.
- Seek site-specific training as to the property and territory that you are assigned to protect.
- Know the safety procedures for each location.
- Understand any materials and/or chemicals you may come into contact with.
- Wear protective footwear with a non-slip sole.
- Wear layers of clothing to protect yourself from the elements
- Always assess the situation before becoming involved and do not respond to an emergency situation if it is unsafe to do so.



Security: Suspicious Persons

Policy

There is no sense risking your (or your coworkers') safety by approaching a suspicious person. By following these safe work practices, you can do your part to safely diffuse any tense situation in which you may find yourself.

- Remain calm.
- Notify police by calling 9-1-1 immediately.
- Keep away from the suspicious person(s). Do not approach the suspicious person(s).
- Take note of what the suspicious person is wearing, what they look like and any items they may be holding.
- If a vehicle is involved, take note of the make, color, license plate number and the condition of the vehicle.
- Never try to apprehend or hold the suspect(s).
- Avoid taking any risks.
- If you are confronted by a suspicious person, stay as calm as possible and use non-threatening language.
- Retreat to an area where others are present or to a room that can be locked.



Sexual Harassment in the Workplace

Policy

While isolated incidents of teasing or offhand comments are not against the law, harassment that is frequent, severe and creates a hostile work environment is illegal and punishable by law. Sexual harassment is psychologically and emotionally damaging, often causing humiliation, loss of dignity, and damage to reputation and career. All employees have the responsibility of behaving in a way that enables others to work in an atmosphere free from harassment of any kind.

Safe Work Practices

If you are a victim of sexual harassment, it is not your fault. Still, the decision to report sexual harassment can be a stressful one. In order to ensure that appropriate steps are taken to correct the problem and prevent it from continuing, you need to take action:

- Tell the harasser that you find their behavior offensive and you want it to stop;
- Report the incidents to your supervisor, general manager, or president of the company.



Sharps Injury Prevention

Policy

Although there are many cases of needle-related injuries among healthcare workers in the U.S, many accidents could be avoided if certain safety guidelines were applied and practiced regularly. There is no reason for you not take responsibility and apply the education you have received towards protecting yourself and those around you.

- Make sure you DO:
 - Use needles with sheaths or caps if you have access to them
 - Inspect the sharp(s) for any irregularities before use
 - Be aware of bystanders and other healthcare workers in the area
 - Use verbal cues when relocating or handling sharp(s)
 - Replace the sheath or cap immediately following use
- DO NOT, under any condition:
 - Leave the room without disposing of the sharp(s) yourself
 - Continue working on the task if you are distracted in any way
 - Attempt to complete a task by yourself if you suspect you may need assistance
 - Place the sharp(s) on the bed, or anywhere other than your designated work space
 - Try to remove the needle without a needle clipper
 - Dispose of the sharp(s) in a trash can or recycle bin
- PROPER DISPOSAL Your facility should provide enough FDA-approved sharps disposal
 containers for every work space to have one within clear view. Sharps disposal containers are
 required to be clearly labeled and:
 - Have walls made of rigid, leak resistant plastic
 - Be equipped with a puncture proof lid that prevents anything from falling out
 - Remain stable and upright during storage and use.



Skid Steer Safety

Policy

Skid steer machines can be operated safely as long as you use common sense, do not tamper with the safeguards, and follow the operator's manual.

- Check your blind spots
- Never allow anyone to ride in the cab with you
- Always wear your seatbelt and/or safety bar
- When traveling on slopes, do not travel across
 - o Instead, travel up and down with the heavy end of the skid steer machine uphill
- Never remove the falling overhead protection or the rollover protection
- Do not allow bystanders to get too close, and never lift a load over a person or let them get near the arms
- Never pick up more weight than the particular machine can handle
- Carry the load low for maximum visibility and stability
- Never speed
- Try to keep away from gullies, crevasses, and creeks to prevent the ground from collapsing under the machine
- Do not wear loose clothing that could get caught in pinch points or controls
- Always look in the direction you are traveling; a backing up alarm is not an excuse not to look where you are going



Slips, Trips and Falls

Policy

On the average, workers who are injured as a result of a slip and fall accident, spend more days away from work than those who are injured as a result of other cause. Loss of productivity is often an unfortunate side effect of slips, trips and falls.

Safe Work Practices

Slips and falls can be avoided by:

- Keeping all passageways, storerooms, service rooms and work areas clean and orderly.
- Keeping floors maintained and in a clean and dry condition.
- Keeping floors free from debris, protruding nails, holes, large cracks or loose boards.
- Keeping passageways and aisles clear with no obstructions across or in the aisles.
- Keeping permanent aisles and passageways appropriately marked.
- Using mats and runners in areas where individuals may encounter slippery surfaces.
- Using warnings to identify slip/fall hazard areas.
- Making sure you can see where you are going and keeping work areas well lit.
- When walking on uneven surfaces such as gravel, uneven lawns, flaws in parking lots, walk a little slower and take smaller steps.



Smoking in the Workplace

Policy

Smoking can be very dangerous, but it is extremely so in the workplace. Remember to follow the rules and use common sense in the workplace so that smoking in prohibited places will not be the cause of injury or ill heath for you or your coworkers.

Safe Work Practices

Smoking laws vary from state to state. It is recommended that both employers and employees educate themselves on their state's smoking laws. Employees should follow their company's smoke-free policies. Some states prohibit smoking in an enclosed space. An enclosed space includes:

- Lobbies
- Lounges
- Waiting areas
- Elevators
- Stairwells
- Restrooms that are part of the building
- Within 50 feet of any area where explosive materials are being handled
- In places where the employees are exposed to asbestos
- In areas used for fueling



Spill Plan

Policy

The best way to protect against spill-related damages is to be prepared for spills before they happen. Knowing what to do is the best first line of defense. Being prepared will act as a road map to direct your response to spills, whenever and wherever they may occur.

Safe Work Practices

The proper procedures for cleaning up an oil spill can effectively be divided into three steps:

- Oil Spill Control
 - If possible, stop the source of the spill.
 - Assess the area for possible ignition sources and remove hazards such as sparks.
 - Put on the appropriate personal protective equipment such as safety glasses, rubber boots, leather gloves, a hardhat, and a respirator depending on what kind of spill it is.
 - Inform management and other appropriate personnel immediately.
- Oil Spill Containment
 - Seal off all openings to any type of drainage systems.
 - Surround the oil spill with gelling agents or oil spill booms to enclose the area of contamination.
 - Be certain that you have secured all points of exit for the spill.
- Oil Spill Clean Up
 - Place oil absorbent pads, pillows or rolls directly on the spill.
 - Continue placing and replacing absorbent pads until all of the oil is completely absorbed.
 - Have a plastic bag ready for the soiled absorbents.
 - Double bag the soiled absorbents to prevent leakage.
 - Label or bag the container.
 - Immediately contact your waste handler for proper disposal.



Spills: Emergency Response

Policy

The best way to protect against spill-related damages is to be prepared for spills before they happen. Knowing what to do is the best first line of defense. Being prepared will act as a road map to direct your response to spills, whenever and wherever they may occur.

Safe Work Practices

REMEMBER S.W.I.M.S.

- How big is the spill?
- Has it made contact with clothing or skin?

Warn Others: Tell your supervisor or the person in charge of emergency response

- Call 911 if there is a medical emergency or danger to life or health
- Alert people nearby

Isolate the Area: Restrict Access to the contaminated area

• Determine the extent of the spill

Monitor yourself: Check yourself carefully and completely

- Check yourself for any chemical contamination or signs/symptoms of exposure
- Be sure you check yourself thoroughly symptoms can be delayed, so look for signs of exposure such as splashes on your skin or wet clothing
- If you have been injured, follow your workplace personal injury procedures for minor injuries
- Call 911 for serious injuries

Stay: Stay in or near the area until help arrives

- Minimize your movements
- Notify your Supervisor



Staging and Fall Protection

Policy

Following the rules on how to set up staging and being sure to use some sort of fall protection will keep staging accidents to a minimum and keep people safe.

- Hook Shaped Stops
 - Place hook-shaped stops on each end of staging members (pieces) to prevent them from slipping off the ropes.
 - Place hooks so they will prevent the staging members from falling if one wire rope breaks.
- Planks:
 - Must be at least 14 inches wide.
 - Must consist of "structural plank" or the equivalent.
- Wire Ropes:
 - Don't make the wire ropes so tight that putting a load on the scaffold will overstress the ropes.
 - Use a safety factor of at least 6 when determining the size of the wire rope to be used.
 - A safety factor is a ratio of how much weight the ropes are designed to hold and the weight they will actually hold during the specific project.
 - Follow the wire rope manufacturer's recommendations for number and spacing.
 - Place the clamps so the "U" is on the dead end.
 - Assuming that everyone knows how to do his or her job correctly can lead to an accident.
- Required Fall Protection
 - Place a guardrail on all open sides and ends of staging OR
 - Install safety nets OR
 - Use safety belts and lanyards
 - The lanyard MUST be tied off to the structure or a separate cable.
- Access and Egress
 - Provide a safe means of entering and exiting the stage.



Step Ladder Safety

Policy

Step ladders are commonly used in all types of industries. Employees who use a step ladder could potentially be exposed to harm if the ladder is improperly set up or used. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring when using a step ladder.

Safe Work Practices

Before using a step ladder, employees should do the following:

- Inspect the ladder for damage. Report a damaged ladder to your supervisor. Do NOT use a damaged ladder. Tag and remove damaged ladders from the work area.
- Ensure that you are wearing the appropriate footwear for step ladders.
- Ensure that the chosen ladder is free of slippery substances.
- Ensure that the area that the step ladder is going to be placed is level.
- Clean up any spills that are in the area where the ladder is going to be placed. Ensure that the area is dry before setting up the ladder.
- Ensure that there are no electrical hazards in the area. If there are electrical hazards, employees should use a wooden or fiberglass ladder in place of aluminum ladder.
- Ensure that there are no overhead obstructions.
- Remove clutter from the area.

When using a step ladder, employees should do the following:

- Ensure that you have the right ladder for the job. To help calculate the correct height, employees should add their height (including their reach) and the height of the ladder to the second rung together.
- Do NOT use the ladder on uneven or wet ground.
- Do NOT place the ladder in front of a closed door. If a ladder must be used by a door, the door should either be locked, blocked open, or guarded.
- When possible, employees should block off the area around the ladder.
- Ensure that the center braces are fully extended and locked before use.
- Only allow one person on the ladder.
- Use three points of contact when climbing or descending the ladder.
- Do NOT exceed the weight limit of the ladder. Employees should add their body weight and the
 weight of the materials they are going to be using together in order to determine the total weight
 that will be on the ladder.
- Keep your body between the rails of the ladder.
- Do NOT overreach. If you cannot safely reach, move the ladder closer to your work area.
- Do NOT step above the second rung.



• When possible, ask another person to support the base of the ladder for added stability.

Stormwater Safety

Policy

When a heavy rainstorm comes, it brings and leaves a lot of water. All this extra water can be very dangerous, both during and after the rainstorm. Stormwater is especially a problem at construction sites because the dirt is loose and can cause flooding, stagnant water, and water pollution downstream. Therefore, be on the alert for different hazards after a storm, and remember these guidelines.

Safe Work Practices

You can prevent stormwater from being so hazardous by:

- Not dumping hazardous chemicals into storm drains or toilets
- Cleaning up after yourself when you are finished for the day on a project
- Finish your projects with something solid to prevent erosion
- Check containers and vehicles for any leaks
- Wash out equipment in designated areas that do not go into storm drains
- Follow the stormwater regulations of your workplace



Stress in the Workplace

Policy

Too much stress causes damage to businesses, relationships, and health. Although stress in little amounts can be good, it is dangerous to be stressed all the time. Therefore, is important to recognize when you are undergoing stress so that you can fight it and prevent the negative consequences.

Safe Work Practices

There are many good ways to manage stress. Here are a few suggestions:

- Get regular exercise
- Good eating habits
- Get enough sleep
- Leave earlier in the morning for work
- Learn how to organize and prioritize tasks
- Share your thoughts and feelings with someone you trust
- Avoid toxic coworkers
- Clean up your workspace
- Get rid of negativity
- Look for humor in the situation
- Don't try to be a perfectionist and don't try to control the uncontrollable
- Do NOT turn to drugs, alcohol or nicotine



Stretch and Flex

Policy

Simply stretching correctly for 8-12 minutes a day can help you avoid injuries and increase your health. Your stretch and flex program will depend on what type of work you do, but as long as you remember the dos and don'ts of stretching, you should be able to decrease the risk of injury, minimize muscular soreness, and increase your flexibility.

Safe Work Practices

Dos of stretch and flex

- Start and finish all stretches in a relaxed, neutral position
- Stretch at your own individual rate and ability; it is not a competition
- Repeat each set of stretches at least three times
- Breathe in a relaxed manner
- Stretch to the point of comfortable tension

Don'ts of stretch and flex

- Do not perform stretches in the wrong order
- Do not over-stretch the muscles
- Do not take insufficient rest between stretches
- Do not bounce while stretching
- Do not continue stretching when you feel pain or discomfort



Substance Abuse in the Workplace

Policy

Drug and alcohol use are normally considered personal issues. However, those under the influence of drugs or alcohol cause friction in the work group, lower morale and work efficiency, use poor judgment that results in bad decisions, and put the safety of themselves and coworkers at risk.

Safe Work Practices

SIGNS OF ABUSE

- Frequent, prolonged, and often unexplained absences.
- Involvement in accidents both on and off the job.
- Erratic work patterns and reduced productivity.
- Indifference to personal hygiene.
- Overreaction to real or imagined criticism.
- Overt physical signs such as exhaustion or hyperactivity, dilated pupils, slurred speech, or an unsteady walk.
- There are certain times of the year when individuals should be especially aware of their alcohol and drug consumption. In winter, some people experience a sense of depression or Seasonal Affected Disorder (SAD). They may turn to drugs or alcohol in the mistaken belief it will relieve the symptoms of the disorder.

WHAT TO DO

- Don't be an enabler.
- Don't "look the other way".
- Don't intervene on your own.
- Don't worry about jeopardizing a substance abuser's job.
- If you are abusing a substance, seek professional help so you can quit.



Substation Safety

Policy

Working at a substation can be dangerous as employees can be exposed to high voltages when working on equipment or lines. The circumstances at a substation can change fast, so employees should be aware of their surroundings at all times. By following the safe work practices presented in this lesson, employees can help minimize their chances of an injury or worse when working on lines or equipment.

Safe Work Practices

Before an employee even steps foot onto the ground of a substation, they should take a moment to inspect their PPE and remove all jewelry. When an employee inspects their PPE, they should do the following to ensure that the protective equipment is in good shape:

- Look for cracks in hard hats, safety glasses, goggles, and face shields.
- Check gloves, shoes, and other pieces of clothing for holes or fraying.
- Ensure that any provided hearing protection, hard hats, eye protection, protective clothing, and all other provided PPE fit properly.
- Report any damaged PPE to your supervisor immediately. Damaged PPE should be removed from the work area and replaced. Employees should not wear damaged PPE.

Due to the amount of electricity that is transferred in and out of a substation, employees should exercise a high amount of caution when entering the work area. When entering and working on equipment, employees should do the following to help ensure everyone's safety:

- Only authorized personnel should be allowed to enter the substation.
- Notify the dispatch center, substation owner, or designated employee before you enter or leave the substation.
 - Always inform someone of your location within the substation. This will help people find you in case of an emergency.
- Close all gates behind you when entering or leaving.
 - At some substations, employees may be required to lock the gates after closing.
- Never work alone. Always work with at least one other person.
- Keep walkways and exits clear of obstructions.
- Ensure that the area in which you are working has proper lighting. Do NOT work in an area that is poorly lit.
- Only use ladders that are non-conductive.
- Always assume that a wire is live.
- Maintain safe work distances from live wires and equipment.
- Always ground a line when performing maintenance.



- Only use insulated equipment that has been rated for the voltage that you will be working with. Using insulated equipment that is below the voltage rating could lead to injuries.
- When possible, de-energize the line or equipment that you will be working on. Always test a line after de-energizing to ensure that line is showing 0.
 - If you cannot de-energize the line, you should isolate the line to help minimize the chances of an injury.
- Ensure that all guards are properly placed on equipment. If the guard had to be removed, ensure that it is put back properly before leaving the area.
- Maintain good housekeeping practices.



Substations and Rigging Safety

Policy

Rigging and moving equipment at a substation can be dangerous. Employees could be exposed to a mixture of hazards associated with the environment and rigging. It is important for employees to remember that substations have live wires and equipment that can store electrical energy. Employees should treat the operation with caution and remember that they are responsible for not only their own safety, but the safety of their coworkers. By following the safe work practices presented in this lesson, employees can minimize their chances of injury during a rigging operation while at a substation.

Safe Work Practices

Note: Before they arrive at the substation, employees should remove any jewelry or other items which may conduct electricity.

Before employees begin to set up the rigging, they should perform an inspection on all the parts and machines that will be used for the operation. Inspections should include:

- Checking all vehicles and mechanical lifting devices for malfunctions or damage.
- Looking for signs of damage on chains, straps, or other materials that will be used to lift the equipment. Signs of damage include:
 - Fraying
 - Holes
 - Corrosion
 - Broken connectors
 - o Dented or broken hooks
- Ensure that all dollies, skaters, or other items that are used to roll equipment are not damaged.

All damaged vehicles, machines, and equipment should be tagged and removed from the work area. Report all damages to your supervisor immediately. Do NOT use any damaged vehicles, machines or equipment.

Note: While other employees are inspecting the rigging, one or two employees should check the foundation that the vehicles, machines, and other pieces of equipment will cross. This is especially important after rain or other weather conditions that can make the ground wet or damp. If weather conditions have changed or the ground shows signs of being wet or damp, the substation supervisor or manager should be contacted to see if it is safe for the operation to proceed.

While rigging and moving equipment, employees should do the following to ensure their safety during the operation:



- Ensure that the path of travel is clear of obstructions and shore up any foundation that is not steady.
- Do NOT use metal tape measures (if applicable).
- Do NOT walk or place your hands under the load.
- Keep your hands and anything that you might be carrying below shoulder level.
- Ensure that the operator of any vehicle or machine can see you.
- Verify that status of the power lines. If you cannot verify the status of a line, act as if the line is live.
- Maintain a safe voltage distance from any live or suspected live wires.
- Maintain clear communication with all of your coworkers during the operation. This includes letting coworkers know if you have changed locations at the substation.



Substations: Forklifts

Policy

Forklifts can make the construction, repair, and replacement of equipment located on substations easier. Employees should remember that they will be either operating or working around a forklift in a high voltage area, so precautions should be taken whenever possible. When employees utilize the safe work practices provided in this lesson, they will find that they minimize their chances of an injury occurring when operating a forklift at a substation.

Safe Work Practices

Before operating a forklift, employees should inspect the vehicle and any attachments that will be used. When inspecting a forklift, employees should look for the following:

- Damaged or low-pressure tires
- Damage to the seat belt
- Bent or cracked forks
- Loose or missing bolts, nuts, guards, etc.
- Fuel level

Note: Attachments will vary, but in general, attachments should be inspected for signs of wear, tear, or any other signs of damage. Report damaged attachments to your supervisor and do NOT use the attachment until it is either repaired or replaced.

 Report all damaged or malfunctioning forklifts to your supervisor. Do NOT operate a damaged or malfunctioning forklift.

Each employee should know their responsibility during the operation. When a forklift is being operated, employees should do the following:

- Use the seatbelt.
- Operate the vehicle in accordance with the manufacturer's instructions.
- Operators should perform a visual inspection of the area around them before moving the vehicle.
- Do NOT speed.
- Maintain clear communications with spotters and other members of the crew.
- Non-operators should ensure that they are visible to the driver.
- Ensure that all attachments have been secured to the vehicle.
- Do NOT exceed the load capacity of the vehicle.
- Non-operators should avoid walking or placing extremities under loads.
- Do NOT attempt to jump from the vehicle if it begins to tip. Keep all body parts within the cab of the
 vehicle.
- Maintain the required clearance distance from all live wires and equipment.



• Do NOT touch the vehicle if it has become energized. If the operator needs to exit the vehicle, they should avoid touching the ground and the vehicle. Operators should jump out of the vehicle with their feet together and then shuffle or hop their way to a safe distance away from the energized area.

Substations: PPE

Policy

Personal protective equipment is an improtant tool in ensuring the safety all employees. Due to the nature of substations, extra precaution should be observed. Electricity can be very dangerous and it does not always act as people wish it too. Employees should ensure that they wear all provided PPE and store it properly when it is not in use. Wearing the proper PPE helps employees take responsibility for their own safety and can show that they care about the safety of their fellow coworkers.

Safe Work Practices

Employees should do the following when wearing or working with PPE:

- Inspect all personal protective equipment (PPE) for damage before starting your shift.
- Report any damaged PPE to your supervisors.
- Do NOT use any damaged PPE.
- Ensure that all PPE fits properly. Report any ill-fitted PPE to your supervisor.
- Ensure that all PPE is cleaned and stored in accordance with the manufacturer's instruction.



Sun Protection

Policy

Overexposure to sun can have terrible consequences, but as long as you use sunscreen, wear the proper clothing, and follow the other tips listed, you will be able to avoid sunburn, skin cancer, and eye damage.

- Use sunscreen in every kind of weather and climate
 - Sunlight reflects off snow, ice, sand, and water, intensifying the rays and possibility of damage
 - Reapply sunscreen every two hours, or after swimming or excessive sweating
 - Don't use sunscreen past its expiration date
- Wear wide brimmed hats, long sleeved shirts, pants, and sunglasses
- Ask your doctor or pharmacist for more information about the medications you are taking- some medications can increase your skin's sensitivity to the sun
- Seek out shade if you can



Team Lifting Safety

Policy

Team lifting is a technique that must be used whenever handling or transferring anything that is too large for one person. Team lifting is required with large objects because working together will make the job easier, faster, and less dangerous.

Safe Work Practices

- Before lifting you should take certain precautions and plan the lift.
 - Note the size of the stove, refrigerator, or other object's size and possible weight.
 - Take note of the intended path and make sure it is clear from obstructions.
 - Designate one person of the lift team to instruct exactly when to lift and turn.
- There should be one employee to help lift for every 50 pounds of weight being lifted.

Moving a 150 pound aluminum pipe, for example, would require three employees.

- If there are handholds, handles, or other gaps, these areas should be utilized for gripping.
- All workers of the lift team should communicate anticipated actions.
- Lifting in a team
 - Stand at the point you will be lifting with your feet about shoulder-width apart.
 - Communicate that you are ready for the lift.
 - Squat down with your knees and grip the object with your palms at a proper lifting point.
 - Slowly extend your legs and tighten your abdominal muscles to lift.
 - Once lifting, never twist or bend to change directions.
 - Continue to communicate throughout the lift and before lowering the load. Lower the load by using your abdominal and leg muscles to slowly squat down and lower the object.



Tire Repair Safety

Policy

According to a rubber manufacturer's survey, 88% of tires are incorrectly repaired. When tires are incorrectly repaired, they can cause accidents, injuries, lawsuits, and even death. Therefore, be sure to properly prepare your tires, and keep these tips in mind.

- Do not repair a tire unless you have been properly trained
 - Always follow the manufacturer's guide for both the tire and the repair kit
- Tires should be completely removed in order to be repaired
- Always inspect the inside of the tire before making the repair
 - The damage may be more than a small hole caused by the puncture
 - Sometimes the penetrating object will cause tread separation or loosen the fibers that make up the tire. The hole may be bigger on the inside, causing water to get inside the tire which will cause corrosion
- Find the object that caused the hole and mark the inside of the tire in order to find it again when you remove the object
 - If you did not mark it, put a soapy mixture around the whole inside of the tire, then pump it up
 - The air leaking out of the hole will cause bubbles to form, and you can find the hole again
- You may have to use a carbine cutter to smooth the fibers broken by the hole to make sure they do not unravel
- Fill the hole to prevent air from escaping or moisture from entering
- Buff the rubber on the tire so the patch will stay on better
 - Be careful not to buff too deeply
- Apply the patch on the inside of the tire



Tire Safety

Policy

To keep your tires operating the best they can, remember PARTS: Pressure, Alignment, Rotation, Tread, Sense.

Safe Work Practices

PRESSURE

- Find out the manufacturer's recommended tire pressure
- Make sure the tires are cool when you check the pressure, otherwise the readings will be incorrect
- Replace the valve caps on all your tires
- It's recommended that you check your tire pressure once a month and before you go on a trip

ALIGNMENT

Have a tire dealer check your alignment if:

- The steering "pulls" in one direction or another when traveling straight ahead on a flat road
- There is uneven wear on the tires
- The vehicle has been involved in a collision.
- The vehicle is continuously used on rough roads

ROTATION

- Rotating the tires extends their useful life by preventing irregular and premature wear.
- Check the owner's manual to see if there is a specified time to change your tires; if not, then consider rotating them once every 5,000 miles.

TREAD

Some of the ways to tell if the tread is so worn down that it's time to replace the tires are:

- The penny test
 - Take a penny and put Lincoln's head into one of the grooves of the tire tread
 - If you can see all of Lincoln's head, it's time to replace the tire
- Check the wear indicator bars: lateral bars molded into the tire grooves that become visible when it's time to replace the tire
- Check to make sure the tread isn't separated from the rest of the tire- if it is, it's time to get a new tire

SENSE



- Replace the tires if the sidewalls are severely cracked or there are bulges anywhere on the tire
- Avoid fast starts, stops, and turns
- Avoid potholes and other objects on the road
- Do not run over curbs or hit your tires against the curb when parking
- Do not overload your vehicle

Tow Tractor Safety AKA Tug Carts

Policy

Tug carts, or tow tractors, are very useful pieces of equipment. Employees are responsible for the safe operation of equipment they have been trained to use as well as reporting unsafe conditions, if necessary.

- Perform a pre-operation inspection to verify that the condition of the lights, brakes, controls, steering, horn, and tires are all in good working condition.
 - Never operate a tug cart that is defective in any way.
- Employees must wear appropriate footwear when operating tug carts.
- Before driving, make sure that your intended path is clear and free of hazards and people.
- Sound the horn when approaching a blind corner or intersection, or when reversing if a backup alarm is not available on the unit.
- Employees must make sure that all loads are properly secured before moving.
- Operators of tug carts must always stay alert for other equipment and personnel.
- Speed must always be limited to the manufacturer's recommendations in order to ensure adequate time for braking in case you need to stop suddenly.
- Tug carts should not be used to push other vehicles, or be allowed to be pushed from one place to another. Properly attach and tow all trailers according to the manufacturer's instructions.
- Do not tow from any point other than the designated hitch.
- Do not drive over slopes that exceed the manufacturer's recommendations.
- Bring the unit to a complete stop, put it in neutral, and set the parking brake when finished using the tug cart.



Tow Trucks: Winch Safety

Policy

When employees take part in safe work practices, they contribute to the overall safety of the company. Following these safe work practices will ensure that employees are as safe as possible.

- Inspect the cable for frays or kinks prior to winching.
- Never walk behind, or stand in front of, a vehicle while it is being winched.
- When winching, keep hands away from cable drum and the fairlead.
- All bystanders should be a minimum of 50 feet away from the winching operation.
- Never stand beside a winch during operation.
- Never attach a winch cable around the bumper or to a tow ball.
- Ensure that the shackles, hook and clevis are securely fastened before applying power.
- In order to keep the winch from overheating, winch in short bursts.
- Never allow the cable to completely unwind from the winch.
- There should always be a minimum three full cable wraps around the drum before winching begins.
- Do not overtighten the winch.
- Never use a winch for transporting or as a securing device. It is only to be used for loading and unloading.
- Never exceed the limits of the cables of the winch.



Tow Yard Safety

Policy

Tow yards are necessary for storage of vehicles while they are either processed for evidence or when people illegally park. Employees working in tow yards could potentially be exposed to harm. By following the safe work practices presented in this lesson, employees can help minimize their chances of being injured while working in the tow yard.

Safe Work Practices

When working in a tow yard, employees should do the following:

- Ensure that you are dressed appropriately for the day's weather.
- Be aware of your surroundings.
- When it is feasible, avoid walking in unlit areas at night.
- Be calm when interacting with customers.
- Do NOT allow customers into the yard without an authorized employee present.
- Watch customer body language for indicators of aggression.
- If you do not feel comfortable with a situation, either ask the customer to leave until they have had a chance to calm down or ask your supervisor to take over.
- Ensure that all security procedures are followed in accordance with your company's policies.
- Do NOT drive a customer's vehicle while it is in the tow yard.
- Watch out for sharp edges or broken glass when working around damaged vehicles.
- Immediately clean up all spills and broken glass in accordance with your company's policy.
- Only authorized employees should operate forklifts.
- Ensure that you are visible to forklift operators.
- Ensure that you have made eye contact with the forklift operator prior to moving in front of it.

When entering or exiting the yard, employees should do the following:

- Ensure that there are no pedestrians before entering or exiting through the gate.
- Alert others to your presence by signaling with your horn.
- Stand to the side of your vehicle when unloading customer vehicles into their spot (if applicable).
- Do NOT have someone stand directly behind your vehicle when unloading customer vehicles.



Towing Safety

Policy

If you follow the included safe work practices, you will avoid costly damage and possible injury to yourself and others. Towing a vehicle or trailer safely includes following all of the regular road rules as well as additional safety guidelines specific for towing.

- Make sure the weight of the load is not too heavy for the tow vehicle.
- Consult the owner's manual to confirm appropriate towing weights.
- Employees must be trained on how to hookup properly before attempting to do so.
- All connections and safety chains must be secured and double-checked before towing.
- Avoid becoming distracted when hooking up a vehicle or trailer to tow.
- If you hear an unusual noise or suspect trouble while towing, employees must stop at a safe place to identify and correct the problem.
- Before driving, and at each fuel stop, you should perform a brief inspection of the following:
 - Attachments
 - Safety chains
 - Lights
 - Tire Pressure
- All of the general road rules for your area must be applied at all times while driving. In addition to that, when towing vehicles or trailers, you should:
 - Avoid sudden acceleration or braking, as these can be highly dangerous.
 - Allow much more time or distance when braking or passing other vehicles than usual.
 - Never pass on hills or curves.
 - Slow down, shift into a lower gear, and never ride the brakes when driving on downgrades.
 - A wider than normal turning radius may be required when towing.
 - Reduce your normal driving speed when towing.
- Trailer-specific towing safety rules that must be adhered to include the following:
 - Un-braked trailers must not weigh more than the empty weight of the towing vehicle.
 - Braked trailers and their loads may weigh more than the empty weight of the towing vehicle only if approved by the recommendations of the trailer manufacturer.
 - The component ratings must meet or exceed the trailer weight.
 - Load weight must be evenly distributed or as recommended by the trailer manufacturer.
 - Cargo must be properly secured against any movement.
 - If sway or whipping occurs, always let off the gas, and hold the steering wheel straight ahead.



Towing Safety: Flatbed

Policy

When employees follow the safe work practices listed below, loading and unloading vehicles from flatbed trailers can be completed safely.

- Before loading or unloading a flatbed towing vehicle, ensure that the area is clear of all bystanders.
- When loading vehicles on the road, activate flashers and emergency lights.
- Chock the front and rear surfaces of each rear wheel of the car carrier when loading or unloading vehicles from the carrier bed.
- Vehicles should be secured by at least four tiedown chains, straps or equivalent devices.
- Do not exceed the safe working load of the flatbed.
- Never exceed the rating of the weakest component of the tow truck.
- Ensure that the attachments have a working load limit that meets or exceeds the chain's or cable's working load limit.
- Ensure that a hook's point is facing upward.
- Never stand behind the carrier bed when it is in a loaded, tilted position.
- Never get beneath the carrier bed after it has been lifted.
- Perform a walk-around inspection after the vehicle has been loaded. Check the position of the vehicle on the carrier bed as well as the winch, cable, all connections and the securing devices.
- When traveling, avoid fast starts, rapid acceleration and sharp turns.



Tractor Safety

Policy

Tractors can be operated safely and efficiently as long as the operator understands and observes all of the safety guidelines involved. Proper preparation, safe handling, and caution when using any attachments or implements will greatly reduce your risk of getting hurt while performing this task.

Safe Work Practices

Preparation

- Be sure the tractor is properly serviced by checking lubrication, fuel, and water. The radiator level must be checked when the tractor is cold.
- Never refuel your tractor while the engine is running.
- Always fuel your tractor outside and store your fuel outside. Store fuel at least 40 feet from any building in an area free of weeds or other burnable material.
- There must be a dry chemical fire extinguisher and a first aid kit on every tractor.
- Only start, repair, and operate the tractor in well ventilated areas to reduce the build-up of carbon monoxide.
- Keep wheels spread wide whenever possible to avoid tipping over.
- If the wheels must be narrowed for a specific job, reduce your speed when operating.

While operating

- Securely fasten your seat belt if the tractor has a Rollover Protection System (ROPS).
- Where possible, avoid operating the tractor near ditches, slopes, embankments and holes.
- Reduce speed when turning, crossing slopes, and on rough, slick or muddy surfaces.
- Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- Do not permit others to ride.
- Operate the tractor smoothly no jerky turns, starts or stops.
- Hitch only to the drawbar and hitch points recommended by tractor manufacturers.
- When tractor is stopped, set brakes securely and use park lock if available.

Attachments

- Keep all shields and guards in place. Do not operate equipment with missing shields or guards.
- Shut off the engine and be sure implement motion has stopped before performing any adjustments or maintenance.
- For some attachments, use counterweight for stability.
- Lift rear-mounted attachments and drive slowly when making sharp turns.
- Raise and lower attachments slowly and smoothly.
- Do not touch, climb over, or adjust the PTO shaft at any time while it is in motion.



Traffic Control

Policy

Working on or near traffic can make a safe job dangerous and a dangerous job much more so. Employees who do this must follow all of the safety guidelines in order to prevent injuries or accidents.

- Stay visible by wearing a safety vest with an approved amount of reflective material on it anytime you are working near traffic.
 - You can also stay visible by not allowing coworkers or other obstructions to block your view of traffic.
- Do not lean or sit on vehicles.
- Stay focused on traffic.
- Do not wear head phones or ear buds that may interfere with your ability to hear.
- In the case of an emergency, such as a car driving into the work zone, keep at least one method of escape in mind.
 - Get yourself to safety then alert your coworkers.
 - Employees must know what to do in all emergency situations, including car accidents.
- Alert your supervisors if you are feeling weak or need somebody to take over for you.
- Hostile drivers:
 - Do not argue or raise your voice.
 - Be professional and civil.
 - Do not lean on or touch their car.
 - If they threaten your safety or fail to follow instructions, discreetly take down their license plate number and vehicle description and report it to your supervisor.



Traffic Control: Freeway and Highway Safety

Policy

It is important for all traffic control employees to remember that when they are working on a highway or freeway, cars could be going at 65 MPH or higher. Flaggers need to make sure that they are visible and ensure that any directions given to drivers are clear and easy to understand. Following the safe work practices will help ensure employee safety while they are working on the highway or freeway.

- Park your vehicle to the side or off of the road when possible.
- Before you leave your vehicle, check your mirrors (rear view and your side mirror).
- Do not open your door when there is oncoming traffic.
- Should you not be able to leave the driver side due to the flow of traffic, exit the vehicle by going out the passenger side door.
- Ensure that you have barriers, signs, and flags that meet visibility requirements.
- Visually inspect the space that you have available to you. Pick out an area that you can easily access should you have to move out of the way of a vehicle or accident.
- Make sure that the area in which you are standing is in a highly visible area for traffic to see you.
- Do not stand in the road way.
- Stand on the shoulder of the road.
- Never turn your back to traffic. You should face all oncoming traffic.
- Give clear directions to drivers.
- Do not cross the center line.
- Do not talk or text on your cellphone. You need to be alert to the flow of traffic at all times.
- A Class 3 retroreflective vest or jacket with a Lime-Green or yellow base color should be worn at night. You should also wear retroreflective pants during a night shift to help make you more visible to drivers
- When working at night, check the batteries on your flashlight.
- Maintain communications with all of your coworkers who are working as flaggers. A radio should be your first choice for communication. Have a way (air horn, whistle, etc.) to quickly alert your coworkers to an accident or a potential accident.



Trailer Door Safety

Policy

Safe loading, transport, and maintenance of trailers can greatly reduce the risk involved with unloading. Practice safety precautions when opening trailer doors to avoid any injury or property damage.

Safe Work Practices

LOADING THE TRAILER

To prevent loads from shifting in the trailer during transport, employees must:

- Secure cargo properly before transport.
- Do not load a trailer that is defective in any way, including bent door handles that could be a hazard to open.
- Make sure the weight of the cargo is properly distributed on the trailer.
 - Top-heavy items should be loaded first.
- Drivers must drive carefully and obey all road rules in their area.

OPENING THE DOOR

- Make sure the vehicle is parked on level ground.
- Visually confirm that the area around the doors is clear of any people or obstructions.

AFTER UNLOADING

- When opening door bar locks, do not stand where the bar lock might swing out at you.
- If the trailer has two doors, only unlatch one at a time.
 - Check inside the trailer and evaluate whether or not the contents have shifted.
- Stand to the side of the doors when first opening instead of directly in front of the trailer.
 - Pull the door open as you step backwards and to the side to keep you out of the path of falling objects.



Trailer Sanitation

Policy

Carriers transporting food play a vital role for their industry and community. Part of that role is ensuring that food remains safe from the moment it enters their trailer to the moment that it is delivered. Next to personal hygiene, sanitizing a trailer before and after a delivery acts as one of many barriers that protects the public from foodborne illness. By following the safe work practices provided in this lesson, employees can sanitize and transport food safely.

Safe Work Practices

SAFELY SANITIZING THE TRAILER

Once a trailer has passed visual inspection and the cab has been cleaned, the carrier should take a moment to sanitize the trailer. Sanitizing can help in the prevention of foodborne illness and help lower or even eliminate the possibility of cross-contamination and cross-contact for foods that contain allergens. Employees should do the following to ensure their safety while sanitizing their trailers:

- Inspect all PPE and cleaning tools for damage. Report damaged tools and PPE to your supervisor.
 Do NOT wear damaged PPE or use damaged tools.
- Prepare the cleaning solution as directed by the manufacturer's instructions.
 - If an employee spills some of the chemical on their skin or clothing, they should remove the article of clothing and wash the area with warm water for 15 to 20 minutes.
- To avoid tracking dirt inside the trailer, employees should first wash the outside of the vehicle and then the inside of the trailer (if applicable). This will help keep dirt and dust from being transferred to the inside of the trailer and to the food while it is either loaded or unloaded.
- If the employee gets cleaning solution in their eyes during the cleaning process, they should use an emergency eye wash station. The eye wash station should be used for 15 minutes.
- To keep food from coming into contact with chemicals, trailers should be rinsed with water and then
 left to air dry. Food can become contaminated by cleaning chemicals if trailers are not properly
 rinsed and dried.

Note: If an employee utilizes a power washer to clean and sanitize a trailer, they should wear the proper PPE and operate the machine in accordance with the manufacturer's instructions.



Trailer and Tongue Safety

Policy

Trailers can be a convenient way to transports goods and equipment around the country; however, trailers can be hazardous if they are not hitched or loaded properly. Employees should not rush the hitching or loading of a trailer. Rushing increases the chance of something being missed or improperly loaded. By following the safe work practices provided in this lesson, employees will help decrease their chances of an accident occurring while driving a trailer after hitching and loading it.

Safe Work Practices

Before hitching and loading a trailer, employees should ensure that both the vehicle and trailer have been parked on a level surface. Employees should remove the keys from the towing vehicle and engage the parking brake.

Hitching

Before hitching a trailer, employees should do the following:

- Check the weight capacity of the vehicle, hitch, and trailer.
- Ensure that the coupler has a hitch pin or other locking device.
- Make sure that the coupler matches the size of the hitch ball.
- Check for damage to the coupler, hitch bar, hitch ball, and any electrical cords. Report any damaged parts to your supervisor.

After making sure that all of the hitch components are damage free or are present, employees should do the following when hitching a trailer to a vehicle:

- Ensure that the coupler fits comfortably over the ball.
- When hooking up the chains, employees should cross the chains. Crossing the chains will help cradle the tongue should the coupler detach from the ball.
- Ensure that all brake and turn signal lights are functioning properly.
- If the trailer come with a braking system, the brakes should be checked to ensure that they are working.

Loading

Once a trailer has been hitched, employees will load the trailer. When loading a trailer, employees should do the following:

- Ensure that the tires have been chocked on the trailer.
 - To ensure safety, towing vehicles should have all parking brakes engaged.



- Check the straps or other tie downs to ensure that they are rated appropriately for the load. Straps and other tie downs should be inspected for damage. Report damaged straps and tie downs to your supervisors. Do NOT use damaged straps or other types of tie downs.
- Load the trailer in accordance with the manufacturer's instructions.
 - It is recommended that heavier items be placed towards the front of the trailer to help stabilize the tongue of the trailer. The tongue should be 10-12% of the overall trailer weight. The trailer should level after loading.
- Ensure that the load has been properly secured to the trailer.



Trench Jack Safety

Policy

When care is taken by employees, the risk of an accident or injury occurring is greatly diminished. By following the safe work practices contained below, employees contribute to safe trenching and excavation operations.

- A trained competent person should supervise all excavation operations, including the installation and removal of trench jacks.
- Use two-man crews to lift, set and remove trench jacks weighing up to 120 pounds. Anything heavier should be lifted and set with equipment such as a boom truck or backhoe.
- Trench jacks should be installed and removed from outside the excavation.
- Trench jacks should be secured to suitable anchors before installation on a cable for tensioning.
- Install trench jacks in a horizontal position and secure them against dislodgement.
- Never install a trench jack directly on plywood when plywood is used as sheathing material.
- There should never be less than two trench jacks used on each set of shoring.
- Trench jacks should be released slowly.
- In unstable soil, use ropes to pull out the trench jacks from above AFTER employees have cleared the trench.
- When trench jacks are being hoisted by sling, workers should stand clear and guide the trench jack with a lead rope.
- Keep hands at least 12 inches from cylinder blocks and other parts of machinery that may crush fingers and other extremities.
- During trench jack removal, only those personnel needed to remove the jack should be in close proximity to the trench. All others should be kept a safe distance away.
- Personnel should never enter an excavation that is not properly shored, shielded or sloped.



Trench Shoring Boxes

Policy

Trench shoring boxes (also simply called trench boxes) are used in construction operations to secure work areas by ensuring ground stability. They are used to protect workers while performing their duties within trenches. Assembling and installing trench boxes present a set of hazards to employees that may be mitigated by following the safe work procedures contained within this lesson.

- Underground services should be located before excavation and installation of trench shoring box.
- Ribbons, barriers or other means of protection should be used to create boundaries around the construction site.
- Personnel should never be inside the box when a trench shoring box is being installed or withdrawn.
- Personal protective equipment should be worn by all employees.
- A load operator should stand to the front of the excavator and maintain eye contact with the machine operator.
- Boxes should not be excessively forced into the ground during installation.
- Use a securely-fastened ladder to enter and exit the work area. Never climb on the struts.
- Trench shoring boxes should be lowered onto level and firm ground. Trench shoring boxes should be set up at right angles to the slope where the ground is sloping, if possible.
- The instructions of the mode of use must be respected during installation.
- Only hooks provided with a screed (safety hooks) should be used.
- Every pin should be secured with the appropriate clip.
- The various parts of the equipment should be checked before installation.
- Employees should never step out of the safe working area into an unprotected section of the trench.



Truck Yard Safety: Pedestrians

Policy

Truckyards are dangerous places because both trucks and pedestrians use the same space to move around. It is up to you to pay attention and engage in safe practices, because the other person may be distracted and therefore cause an accident.

Safe Work Practices

Drivers

- Make it your g.o.a.l.: get out and look to ensure your truck can be safely moved into and out of the yard area.
- If you have someone else with you, have them act as a spotter.
- If you cannot see the spotter, never assume they are out of the way.
- Pay attention to any special pedestrian safety zones.

Pedestrians

- Always sweep your path for truck drivers.
- Do not ever let your guard down, even when walking in designated safe pedestrian areas.

What to do when driving

- Obey all speed limits.
- Watch mirrors closely.
- Never pull right behind someone.
- Activate 4 way flashers and sound your horn before backing up.
- Avoid oversteer, which will make you lose control of the truck. Oversteer is caused by:
 - Steering sharply into a corner then putting on the brakes, which aggressively shifts the weight to the front of the truck.
 - Sharp acceleration.
- Remain alert.
- Do not show off or engage in stunt driving.

What to do when walking

- Stay clear from areas where trucks are backing up
- Wear high visibility vests with reflective panels
- Do not use ramps or paths designated for vehicles only
- Let drivers know if you have to perform a task in the area
- Do not distract drivers
- Do not engage in horseplay
- Never assume the driver has seen you



Truck Yard Traffic and Avoiding Accidents

Policy

Parking yards and facilities can be dangerous places where accidents can occur. Your awareness is the key. Always consider your safety and the safety of others when arriving at and leaving yards and parking facilities.

Safe Work Practices

Drivers

- Take your time in the yard, slow down and be aware of what you are doing.
- Check for pedestrians, other vehicles & obstructions before pulling out of the yard.
- Follow the proper flow of traffic.
- Maintain a safe speed while in the yard.
- Pull into a space properly by not blocking a lane or crowding others. It is wise to park so you can drive forward when leaving the space. This eliminates backing out of a space.
- When exiting your vehicle, look over your shoulder before opening the door and watch to make certain that another vehicle isn't in the process of parking next to yours.
- Always stay to the right side of the aisles and observe any posted speed limits.
- When backing up, remember, you can't see everything behind you.

Backing Up

- Avoid backing if possible.
- Back to the driver's side, (left), only if at all possible. This provides the driver with a clearer view of his trailer and helper.
- Back the shortest distance possible.
- Avoid backing into traffic wherever possible.
- Try not to back around an intersection or the corner of a structure. This is blind backing.
- If you are backing and you have a partner in the rig, have that person get out and assist in directing
 you. Agree on hand signals before you start the maneuver. Make sure you can see the person
 directing you on the ground.
- Walk around the vehicle before backing. Look over your path of travel to see that it is clear. You may have to walk around several times during a difficult maneuver, if alone.
- Do not go heavy on the accelerator or ride the clutch.
- Do not over-steer and watch the mirrors closely.

Pedestrians

- When moving through the yard or parking facility, walk in the designated walkways and crosswalks.
- Always be aware of your surroundings and listen for moving traffic.



- Yield the right of way or make sure that the vehicle has yielded to you.
- Never assume that the driver has seen you and recognized your intention to step into the truck path.
- Avoid horseplay in the parking yard.
- Do not distract drivers.
- Always remain alert to the equipment moving around you.
- Do not get near moving equipment unless necessary.
- Do not walk along or beside equipment. If it is necessary to travel with a piece of equipment, walk in front or behind it.
- Try to stay in view of the operator.



Trucks and Trailers: Securing Cargo

Policy

If all the proper techniques and safety guidelines are applied, transporting loads of material can be done safely and efficiently. Skipping steps in order to improve speed will only result in missing deadlines and unnecessary grief should an accident occur.

- Perform a short vehicle inspection before loading, making sure to check for:
 - Flat tires
 - Working lights
 - Dangling hoses or wires
 - Trailer or truck is chocked and on good firm ground.
 - Anchor points and trailer hitch are both intact.
 - Debris, mud, and ice are removed from loading area.
 - Loose tools, panels, or equipment are removed or secured.
- Tie-down equipment
 - Edge protectors should be used when securing a load with polyester straps.
 - You should know the rated capacity of snap or lever binders just as you would a chain.
 - Snap binder handles must be secured to prevent them from swinging open.
 - Close binder with an open palm to avoid pinching your fingers.
 - Do not use a "cheater pipe" to increase leverage, as it may snap off.
 - Chains and securement equipment must be in good condition and used correctly.
 - Familiarize yourself with the appropriate number of tie-downs necessary for any given load –
 this varies depending on the length and weight of the load. Remember that you should secure
 the load from shifting or bouncing in all five directions: forward, back, left, right, and up.
- Additional recommendations
 - Blocks must be used with some loads to prevent sliding, tipping, or rolling. Material used for blocking must be strong enough to resist splitting or crushing by equipment.
 - Only competent operators should drive equipment when loading industrial trucks onto trailers or using a forklift to load material.
 - When the load to be transported is material stacked in boxes, they should be properly stacked and secured according to your employer's recommendations (also listed in the Box Handling and Stacking lesson by EEAP, Inc.).



Utility Terrain Vehicle (UTV) Safety

Policy

UTVs can be a great tool for any business or industry. The key to a safe UTV is keeping up on the maintenance and driving it properly. One thing that all employees need to remember is that these vehicles can tip easily so driving at low speeds is the best method to avoid tipping. If an employee utilizes the safe work practices provided in this lesson, they will find that they minimize their chances of being injured in an accident while driving a UTV.

Safe Work Practices

Before an employee drives a UTV, the following should be done to ensure employee safety:

- Ensure that any UTV operator has a valid driver's license. Do NOT allow inexperienced drivers to operate a UTV.
- Be familiar with all local and state laws. Some roads do not allow for UTVs to be driven on them.
- Inspect the UTV and equipment for malfunctioning parts or damage. Report a damaged UTV to your supervisor. Do NOT drive a damaged or malfunctioning UTV.
 - Inspections should include checking the tire pressure. If tires are low, fill them to the manufacturer's specified pressure.
- Do NOT use damaged personal protective equipment (PPE).
- Check the day's forecast. If inclement weather is predicted, either carry additional personal protective equipment or do not drive the vehicle.
- Carry a radio or other communication device with you to use in the event of an accident.

When drivers are ready to use the UTV, they should observe the following while operating the vehicle:

- Use the provided seatbelts. Do NOT drive a UTV if the seatbelts are damaged.
- Drive at a low speed, especially on uneven terrain as UTVs can easily tip.
- Do NOT drive on paved roads. If you need to cross a paved road, ensure that there are no vehicles
 coming and cross at a safe speed. If you need to turn, turn slowly to avoid tipping.
- Keep all body parts in the cab or cockpit.
- Check your surroundings when driving. Try to avoid obstacles and steep slopes whenever possible.
- Do NOT attempt to stop the UTV from tipping with any part of your body. If you do start to tip, keep your hands on the wheel and brace yourself. Passengers should hold on to hand bars and brace themselves. Passengers should NOT grip the roll cage.
- Do NOT exceed the weight limit of the UTV.
- Secure all loads that are placed in the bed of the UTV. The UTV should be on level ground when loads are placed in the bed.



- If you start to feel tired, take a break. You should drink water during breaks to stay hydrated.
- Do NOT drive on the side of slopes.
- Do NOT park the UTV on a slope.
- Do NOT drive through deep water.
- Do NOT attempt to do tricks while driving a UTV.



Vehicle Floor Jack Safety

Policy

Using vehicle floor jacks is a good way to do quick jobs underneath a vehicle. As long as employees use the required protective equipment and follow all of the manufacturer's safety recommendations, this job can be done quickly and safely.

Safe Work Practices

Before lifting the vehicle, employees should:

- Read and understand the vehicle's manual and know how to operate a floor jack.
- Make sure that the floor jack has a sufficient weight capacity capable of lifting your vehicle.
- Only jack cars up on a hard, flat surface such as concrete.
 - If you must lift the vehicle on asphalt or dirt, place 5/8" thick plywood underneath the floor jack and jack stands to prevent sinking.
- If you will be removing the tires, loosen the lug nuts while the car is still on the ground.

Once you are ready to begin, follow the instructions of the jack manufacturer to lift the vehicle to the desired height.

- Position the floor jack underneath one of the lift points of the vehicle. Placing the jack on an
 incorrect lift point can be dangerous and potentially damaging to the vehicle. Reference your
 vehicle's owner's manual to verify appropriate lift points.
- Never use cement blocks or wood as jack stands. Jack stands are required, but wooden or cement
 jack stands are structurally unsound as wood may splinter and cement blocks can easily crack and
 crumble. Wheels must be chocked with materials specifically intended for the blocking of vehicles.
- Always chock your wheels AND set your emergency brake. Employees must immobilize the vehicle before lifting it by placing tire or wheel chocks on both sides of each tire on the ground.



Vibration Exposure

Policy

Constant exposure to vibration often occurs in jobs such as farming, construction, shipping, and logging. It can cause back pain, "white finger syndrome", and carpal tunnel syndrome. Being aware of this problem is important so that preventative measures can be taken.

Safe Work Practices

To prevent damage from Whole Body Vibration:

- Maintain equipment to prevent unnecessary vibration.
- Use air-ride or suspended seats.
- Use simple motions when exiting a vehicle with minimum rotation or twisting.
- Avoiding lifting heavy objects or bending immediately following exposure.

To prevent damage from Hand Arm Vibration:

- Use anti-vibration tools and follow the instructions.
- Maintain equipment to prevent unnecessary vibration.
- Keep fingers warm and dry.
 - Cold aggravates the symptoms of Hand Arm Vibration.
- Use anti-vibration gloves.
- Use a light hand grip that is sufficient to operate the tool safely.



Vibrator Plate Compactor

Policy

Vibrating plate compactors are great tools for the landscaping and construction industries; however, while these machines are easy to use, they do carry the potential to harm employees if they are used improperly. By following the safe work practices provided in this lesson, employees can help minimize their chances of an injury occurring while operating a vibrating plate compactor.

Safe Work Practices

Before operating a vibrating plate compactor, employees should do the following:

- Inspect all PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Inspect the machine for damage. Report a damaged machine to your supervisor. Do NOT operate a damaged machine.
- Ensure that all safety decals are attached and are readable. Replace missing or defaced safety decals.
- Ensure that all guards are secured and in place. Do NOT operate this machine if it has missing guards.
- Remove big pieces of debris (branches, large stones, etc.) from the work area.
- Check the fuel level of the machine. Refuel the machine as needed. Only fill the tank when the machine is cool. Do NOT fill a hot tank. Do NOT refuel near flammable materials or ignition sources.
- Do NOT lift the machine alone. Lift with either a partner or other piece of equipment.

When operating this machine, employees should do the following:

- Operate this machine in accordance with the manufacturer's instructions.
- Do NOT operate this machine if you are tired or otherwise impaired.
- Do NOT start or run the machine in an enclosed area.
- Do NOT smoke while operating this machine.
- Keep coworkers out of the compacting area while the machine is being used.
- Keep hands and feet away from the base plate during operation.
- Do NOT operate this machine on slippery surfaces.
- Do NOT leave the machine running while unattended. If you need to leave the machine, ensure that it has been turned off before leaving the area.
- Only use attachments and accessories that have either been provided or approved by the manufacturer.
- Operate this machine in areas of good visibility and adequate lighting.
- Inform your supervisor if you start to feel fatigued when operating this machine. Take all designated breaks when operating this machine.



- Do NOT touch the muffler during or after operation. Touching a hot muffler could result in severe burns.
- Do NOT attempt to lift this machine while it is running.
- Clean the machine in accordance with the manufacturer's instructions.



Violence in the Workplace

Policy

The workplace is any location, permanent or temporary, where an employee performs work or work-related activities. Workplace facilities include lunchrooms, rest rooms, break rooms, vehicles used for work, and parking facilities. Workplace violence contributes to employee injuries, stress, increased sick days, reduced morale, lost wages, and higher health-care costs.

- Under no circumstances is any employee to engage in verbal or physical threats or actions, which
 may cause another employee or person to feel threatened, afraid or to create a security hazard.
 Verbal or physical threats include:
 - Swearing
 - Lewd gesturing
 - Making offensive remarks
 - Direct or veiled threats
 - Harassing telephone calls
 - Shouting
 - Disregard for the safety of other employees
 - Throwing anything
 - Kicking an object
 - Slamming doors
 - Displaying weapons of any kind
 - Anv act which may cause another employee to feel threatened or intimidated
 - Having concealed weapons on their person or in their personal effects. (Except when required by their employment duties.)
 - Any action which could reasonably be interpreted as done for the purpose of inciting or insulting a coworker, supervisor, customer or any person.
- Every employee deserves a workplace that is free from harassment and threats where no one feels afraid while at work. Remember to report any incident to your supervisor or employer.



Wash Your Hands

Policy

Hand washing doesn't take much time or effort, but it does offer great rewards in terms of preventing illness. The simple act of washing your hands prevents ingestion and absorption of harmful substances, the spread of infection and diseases, absenteeism due to illness, and lost work time.

- Use warm water
 - Hot or cold water is not recommended because of the uncomfortable temperature; you will likely not wash long enough and you risk making your skin tough and chapped
 - Hot water is used to kill microbes and sterilize objects, but you don't want to stick your hands in water that hot
- Use soap
 - Use whatever soap you like- antibacterial soaps are popular but regular soap does the job just fine
 - The real cleansing is done by the friction and force of rubbing the soap against your hands
 - Soap suspends microbes, allowing them to be rinsed away
- Rub your hands together vigorously and scrub all surfaces
 - Lather up on both sides of your hands
 - Remember to get between your fingers and under your nails
 - Wash for 15-20 seconds- about how long it takes to sing "Happy Birthday" twice
- Pat dry with a clean towel
 - Don't use your clothes to dry your hands; your clothes could be dirty and wiping your clean hands on your dirty clothes defeats the whole purpose of washing your hands



Weather Conditions

Policy

Outdoor jobs are not only subject to hazards directly related to the job, but also from sources like the weather that cannot be controlled. Employees must follow all safety practices relating to their job AND stay vigilant in detecting poor weather conditions when working outside.

- Outdoor job sites must always be prepared to shut down if thunderstorms are forecast.
- Keep an eye on the weather throughout the day and seek shelter if necessary, even if there is no
 official thunderstorm advisory.
- Electrical workers or roofers may need to shut down jobsites in high winds, thunder, or rain long before there is a weather advisory.
- If there are no available safe shelter sites, seek cover low to the ground (such as in clumps of bushes) or under trees of uniform height.
- If a co-worker gets struck by lightning, administer first aid immediately.
 - o Call 911, because an electrical shock may result in cardiac arrest.
 - Wait for a safe opportunity in between lightning strikes to move the victim.
 - Begin CPR the body does not retain an electrical charge.
 - Do not remove burned clothing unless necessary.
 - Treat for shock, if necessary.



Wet Working Conditions Safety

Policy

It can be dangerous to work in wet or damp work environments. Employees could potentially be exposed to both physical and health hazards. By following the safe work practices presented in this lesson, employees can help minimize their chances of an accident occurring while working in wet or damp working conditions.

Safe Work Practices

Before working in wet or damp working conditions, employees should do the following:

- Inspect all provided PPE for damage. Report damaged PPE to your supervisor. Do NOT wear damaged PPE.
- Inspect all guardrails, safety protection devices, work equipment, and tools for rust or deterioration from moisture. Report any damaged safety guards or equipment to your supervisor. Do NOT use damaged equipment or work near damaged safety guards.
- Inspect work area for mold. Report mold to your supervisor.
 - When excessive moisture or water accumulates indoors, mold growth often will occur, particularly if the moisture problem remains uncorrected. While it is impossible to eliminate all molds and mold spores, controlling moisture can control indoor mold growth.
- Inspect work area for mud. Scrape up and remove any mud that might produce a slipping hazard.
- Inspect any excavations or earthworks. Wet ground could cause a collapse.
- If in a cold environment, inspect the work area for ice. Scrape up any ice or spread a deicer.
- Ensure the work area is well lit. Working in a low light area might obscure slipping hazards.
- Ensure all hand tools have nonslip grip handles.
- Ensure no power cords, cables, or outlets are wet or damp.
 - Even if power cords or cables are plugged into a GFCI-rated outlet that has stopped working it is recommended to shut off the power at the breaker box to avoid possible electrocution.
- Clean up all temporary wet spots and place wet floor sign.

While working in wet or damp working conditions employees should do the following:

- Practice good housekeeping.
- Periodically wipe or clean eye protection of excessive moisture.
- If feet are continuously wet throughout a workday, employees should change into clean socks at least three times to avoid trench foot.
- Periodically remove mud from work boots throughout the day.

After working in wet or damp working conditions employees should do the following:



- Completely dry all PPE and work equipment.
- Change all wet clothing.
- Clean up puddles or any other wet areas.

Working Alone Safely

Policy

Working alone is sometimes more hazardous than doing the same job with other people. If an accident occurs, a "lone worker" must worry about getting themselves to safety and calling for help at the same time. If you perform all or parts of your job by yourself, you are required to follow the basic safety guidelines involved.

- Never work alone in confined spaces unless there is an entry supervisor.
- Do not work alone with dangerous equipment or tools unless you have been properly trained.
- Talk to your boss and coworkers about where you will be working.
- Make sure you have a method of communication with your boss or coworkers with either a cellphone or other effective communication system.
 - Always keep your cell phone charged and have important numbers stored.
- If you will be working outside, you must remember to take all the required shade and water breaks to avoid heat illness.
- If possible, work in areas that are visible to others from a distance.
- Before starting your tasks, and throughout the task, pay attention to your surroundings to assess any potential hazards.
- If you will be driving, have a clear travel plan and make sure others are aware of this plan.
 - Vehicles should be well-maintained and complete with an emergency kit.
- Employees who work alone in public may not carry weapons with them and should leave or call for help immediately if they feel threatened in any way.

