USD 405 – LYONS Safety Manual



Information Obtained From: Environmental Compliance Program from the Occupation Safety and Health Administration and

U.S. Department of Labor

BOE Approved: April 10, 2023

INTRODUCTION

OSHA REQUIRES YOUR EMPLOYER TO:

Provide: information about the hazards you may face on the job.

Identify: potential causes of job-related injury or illness

Explain: procedures, equipment, and training that you and your employer must use to reduce hazards and perform jobs safely.

YOUR EMPLOYER WILL PROVIDE YOU WITH:

- 1. Safety training specific to your job and the hazards around you
- 2. Protective clothing and equipment
- 3. Material Safety Data Sheets that explain chemical hazards
- 4. Educational materials. Including, handbooks, posters, pamphlets, newsletters, videos, and safety memos
- 5. Emergency and first aid plans

Hazards can be found almost everywhere in the workplace, and there are many different types, including slipping on a wet floor, accidents with machinery and other equipment, burns from chemicals, and fires from flammable materials.

Your employer tries to eliminate unsafe working conditions and gives you the equipment, training, and skills you need to protect yourself against them. Do your part by taking the responsibility to learn and understand safety guidelines and procedures before starting any job.

It is also important that you know your schools Emergency Action Plan that will tell you what to do in case of an emergency like a fire or a chemical spill.

Most important, practice what you learn - it could save your life! And if you don't understand something, ask your supervisor. Make the commitment to keep your workplace safe.

First aid- Know what to do and known use of AED's and Bloodborne Pathogen Plan.

GOOD HOUSEKEEPING PRACTICES:

- 1. OSHA has housekeeping requirements
 - a. Keep workplaces clean, orderly and in a sanitary condition.
 - b. Keep floors in a dry condition.
 - c. Keep floors, workplaces and passageways free from protruding objects and unnecessary holes and openings.
- 2. Keep combustible wastes to a minimum, stored in covered metal receptacles and disposed of daily.
- 3. Keep work areas neat, organized and safe.
 - a. Don't leave tools, materials, cords, boxes, cables or hoses on the floor.
 - b. Repair loose floorboards, holes or other floor problems that could cause tripping.
 - c. Clean up spills immediately, they cause slipping hazards.
 - d. Never place materials in aisles and passageways or on stairs.
 - e. Stack materials carefully, so they don't fall over or block access sprinklers.
 - f. Keep tools well organized, put them back when you're not using them.
 - g. Keep all drawers and cabinet doors closed when they're not in use.
 - h. Avoid keeping food and beverages in the work area; they may be contaminated by chemicals.
- 4. Prevent Flammables, combustibles, and electrical equipment from causing fires.
 - a. Keep containers closed when not in use.
 - b. Dispose of oily rags in a closed container.
 - c. Dispose of paper and other trash promptly.
 - d. Don't let grease or dirt build up on machinery and equipment
 - e. Keep paper and other combustibles away from lights and electrical equipment.
- 5. Take responsibility for identifying and eliminating hazards
 - a. Keep all work areas neat, clean, and safe.
 - b. Keep aisles, passages, and stairways clear and uncluttered
 - c. Put tools and materials away in designated areas.
 - d. Report anything that's broken or not working properly.

MACHINE SAFETY:

Machine parts that move can cause serious injury when guards and safety devices are not properly in place. Machines that throw off chips or sparks can cause eye injuries or burns.

- 1. Contact with moving parts can cause:
 - a. Amputations.
 - b. Broken bones.
 - c. Cuts and Bruises.
 - d. Damage to muscles, ligaments, and tendons.
- 2. OSHA requires guards or devices on machines in order to prevent injuries.
 - a. At the point of operation, where material is being processed.
 - b. Where moving parts contact or come close to other parts.
 - c. Rotating parts, such as rollers, circulating blades, grinding wheels.
 - d. Blades or cutting parts.
 - e. Pinch point.
- 3. Guards block body contact
 - a. Can be fixed in place.
 - b. Can be adjustable.
 - c. Can be devices that force hands away from danger points.
 - d. Can be pressure-sensing devices that shut a machine down.
- 4. Never remove, disable, or reach through or around a guard.
- 5. Know how to operate all machinery properly.
 - a. How to turn the equipment on and off and operate it safely.
 - b. Check guards and other safety devices.
 - c. Make sure all parts are in place.
 - d. Do routine maintenance.
 - e. Lock/out or Tag/ out before repairing or servicing equipment.
- 6. Know what to do to prevent injuries.
 - a. Use push sticks, tongs etc. to prevent hand injuries.
 - b. Follow all operating steps; don't take shortcuts.
 - c. Wear approved eye protection.
 - d. Avoid wearing gloves, loose clothing, jewelry, loose long hair.
 - e. Give full attention to the job.

ELECTRICAL SAFETY:

- 1. If you touch equipment that isn't grounded or has defective insulation, your body may conduct the electricity. That can result in shock, which may cause:
 - a. Pain, loss of muscle control, internal damage, cardiac arrest, or death.
 - b. Burn to your skin or internal body tissue.
 - c. Cause fires or explosions if exposed to flammable substances.

Protect Yourself from Shock:

- 1. Inspect electrical equipment before use to be sure insulation is in good condition.
- 2. Check that plugs have a good, tight connection.
- 3. Never bend a 3-pronged plug or force it into a 2-pronged outlet. Never use equipment that is missing a ground prong.
- 4. Use only wiring that is approved for use in outdoor or wet areas, and plug into ground fault circuit interrupters (GFCIs).
- 5. Don't touch anything electrical with wet hands or while in a wet area.
- 6. Don't contact anything electrical with anything metal.
 - a. Don't wear metal jewelry or a metal hard hat around electricity.
 - b. Don't use metal tools, including ladders, around electricity.
- 7. Use insulated, nonconductive tools around power sources.

Prevent Electrical Fires:

- 1. In areas with flammable liquids, vapors, or combustible dust, use only electrical equipment identified as safe for that use.
 - a. Be sure equipment doesn't spark or get hot enough to ignite flammable liquids, vapors or combustible dust.
- 2. Don't overload outlets, circuits, or motors.
- 3. Don't let grease, dust, or dirt build up on machinery.
- 4. Dispose promptly of oily rags, paper, sawdust, etc. Don't let them contact electric lights or equipment.

Obey Restrictions on Electrical Circuit Access:

- 1. Control panels and circuit breaker/fuse boxes for live electrical parts of 50 volts or more must be in approved cabinets or enclosures or in separate rooms or behind partitions or at least 8 feet above ground.
- 2. Obey warning signs and locks; keep out unless authorized.

Treat Electrical Equipment with Care and Respect:

- 1. Don't use cords to raise or lower equipment.
- 2. Don't fasten cords with staples, nails or anything that could damage insulation.
- 3. Prevent damage by untangling cords and not running them along the floor or in aisles,
- 4. Use extension cords only if necessary and when rated high enough for the job. You cannot use extensions cords as a permanent fix. They must be removed when you are not using equipment. Do not walk or step on power strips as it may cause damage.
- 5. Use only approved cords outdoors.
- 6. Keep machines and tools properly lubricated.
- 7. Don't reach blindly into a space that may contain energized equipment.

Work on Energized Electrical Equipment Only if Trained and Qualified:

- 1. Electrical circuits and equipment are usually de-energized and locked or tagged out before being worked on.
- 2. Only qualified workers can perform tests or other work on "live" parts.
- 3. If you're **not** a qualified worker.
 - a. Stay away from energized equipment, and at least 10 feet from power lines.
 - b. Never remove someone's lock or tag that is being worked on or locked out equipment.

LADDER SAFETY:

Proper Ladder Selection, Inspection, and Use Can Prevent Falls and Injuries:

- 1. OSHA standards cover ladder design as well as requirements for:
 - a. Inspecting ladders and removing unsafe ladders from use.
 - b. Training employees about safe ways to climb and work on ladders.

Select the Right Ladder for the Job.

- 1. Use a ladder, not a chair or box, to reach heights, the ladder should be:
 - a. Tall enough to reach the height you need.
 - b. Rated to handle the combined weight of you and your equipment.
 - Ladders are rated I-A (holds 300 pounds); I (250 pounds); II (225 pounds):
 III (200 pounds. Not usually used on the job).

Inspect Every Ladder Before Using It:

- 1. Don't use a ladder that has any missing or broken parts.
- 2. A ladder should have no missing parts.
- 3. A ladder should have firmly attached slip-resistant steps, rugs, or cleats free of grease or oil.
- 4. They should have tight support braces, bolts, screws, and spreaders.
- 5. They should have well lubricated metal parts.
- 6. Ladders should have safety feet.
- 7. Ropes on extension ladders should be in good condition.
- 8. A ladder should not have splinters or sharp edges.
- 9. A metal ladder should be free of dents or bent parts and never use when working with electricity

Set Up a Ladder Firmly and Properly:

1. Place it on level floor or ground, with feet parallel to the surface it rests against.

- a. Place the ladder on wide boards if the ground is soft or broken.
- 2. Extend the ladder at least three feet above the top support.
 - a. Don't rest it on a window or window sash or in front of an unlocked door.
- 3. Anchor the top. Tie the bottom or have someone hold it.
- 4. The distance from the ladder's base to the wall should equal on-forth the ladder's length.

Climb and Work on Ladders Safely:

- 1. Wear shoes with clean, nonskid, non-leather soles.
- 2. Allow only one person at a time on a ladder.
- 3. Climb up and down facing the ladder and holding both side rails.
- 4. Carry tools on a belt or rope or hoist.
- 5. Work with one hand on the ladder.
- 6. Don't stand on the top two steps of a stepladder or top four ladder runs.
- 7. Move slowly and cautiously on a ladder.
- 8. Don't move the ladder while you're on it.
- 9. Center your body on the ladder so your belt buckle is between the side rails.

Carry and Store Ladders Properly:

- 1. Carry a ladder with another person when possible.
 - a. If you must carry alone, balance the center on your shoulder. Keep the front end above your head and the back end near the ground.
- 2. Store ladders in a dry, well ventilated area kept at a moderate temperature.
- 3. Store ladders standing up, if possible.
 - a. If they must lie down, support both ends and the middle to prevent sagging or warping.
- 4. Don't keep anything on a stored ladder, or the ladder will warp.

Conclusion: Take the time to choose, inspect, and use a ladder safely.

SAFE LIFTING:

- 1. Back injuries are one of the most common causes of work-related disability.
- 2. Back pain is the second-leading cause of lost work days, after the common cold.
- 3. Once back strain occurs, it often returns.
- 4. Back injury often requires extended bed rest and, in some cases, surgery.

Tips to prevent Injury to the back:

- 1. Before you lift:
 - a. Lift a corner of the load to decide if you can safely lift and carry it.
 - b. If in doubt, use a dolly, hand truck, or forklift- or get help.
 - c. Plan a straight, flat route; remove anything in your way.
 - d. Loosen muscles with gentle bends and stretches.
 - e. Wear gloves and sturdy shoes with nonskid soles.
 - f. Avoid loose clothing you could trip over.
- 2. When you lift:
 - a. Stand close to the load.
 - b. Squat, with knees bent and back straight.
 - c. Grip firmly.
 - d. Bring the load close to your body.
 - e. Push up slowly with your legs.
- 3. When you carry:
 - a. Carry the load waist high.
 - b. Take small steps.
 - c. Move your feet to change direction. Don't twist.
- 4. When you unload:
 - a. Lower the load slowly, knees bent.
 - b. Place the load on the edge of the surface and slide it back.

EYE PROTECTION:

Eyes Need Protection from a Variety of Workplace Hazards:

- 1. Flying objects: such as wood, metal, plastics, stone fragments, and sparks.
- 2. Splashes from chemicals, including acids and corrosives, and molten metal.
- 3. Swinging objects like ropes and chains.
- 4. Electrical arcs and sparks.
- 5. Dust, fumes, mists, gases, and vapors.
- 6. Radiant energy from welding, cutting, and ultraviolet or infrared light.

Protective Eye Wear Should Fit Well:

- 1. Spectacles should fit like other glasses.
- 2. Goggles should fit with the bridge on your nose, and the center of the lens in front of you eye.
 - a. Adjust straps and place them low on the back of the head for a good fit.

Combine Protection with Prescription:

- 1. If you wear prescription eye wear and need eye protection, you must use either:
 - a. Protective eye wear that has the prescription
 - b. Safety goggles over prescription glasses
- 2. You should **not** wear contact lenses in areas with dust and/ or chemicals.

Inspect Eye Protection Daily to Assure It's in Good Condition:

- 1. Replace Knotted, twisted, worn, or stretched out goggle straps.
- 2. Replace eyewear that has lenses too pitted, scratched, etc. to see through.
- 3. If lenses fog up, use lens defogging solution.

Give Eye Protection Equipment Good Care:

- 1. Clean lenses after every use with soap or mild detergent and water or special solution designed for that purpose.
- 2. Disinfect eyewear if it's contaminated by hazardous chemical, or if it may be worn by another person.
- 3. Store clean eye wear in a closed container protected from dust, moisture, or damage.

Act Quickly If Your Eye Is Splashed or Injured:

- 1. Chemical Splash:
 - a. Flush with water for at least 15 minutes (using an eye fountain); then see a doctor.
- 2. Particle in the eye;
 - a. Blink to try to get it out. If you can't, close and cover the eye and see a doctor.
- 3. Object hitting the eye:
 - a. See a doctor immediately

Conclusion:

Always Give Eyes the Highest Possible Level of Protection.

HEARING PROTECTION:

- 1. High noise levels can damage hearing and cause safety problems:
 - a. Hearing loss can be temporary or permanent.
 - b. Tinnitus is a constant or periodic ringing or roaring in the ears.
 - c. Hearing loss causes the inability to hear signals and safety warnings, interferes with communications.
 - d. High noise levels cause stress, poor concentration, headaches, etc.

OSHA Requires Employers to Protect Employees from High Noise Levels:

- 1. Employers must measure workplace noise levels. If 8-hour time-weighted average exposures are 85 decibels (dB) or more, a Hearing Conservation Plan is needed.
 - a. A dishwasher is 65 dB; power sander, 85; jackhammer, 110; jet engine, 140.
- 2. Monitor noise levels and report results to employees.
- 3. Test employee hearing to set a baseline and identify any losses over time.
- 4. Try engineering out workplace noise.
- 5. Provide employees still exposed to high noise levels with hearing protection devices and training on how to select, use, and care for them.

Cooperate with Efforts to Reduce Workplace Noise Exposure (Such as):

- 1. Placing noisy machinery or operations in separate areas.
- 2. Lubricating and maintaining equipment to eliminate rattles and squeaks.
- 3. Replacing worn or loose machine parts.
- 4. Mounting machines on rubber to reduce vibration.
- 5. Choosing quieter machines when replacements are needed.
- 6. Installing sound barriers around noisy equipment.
- 7. Using sound-absorbing pads, ceiling materials, etc.
- 8. Reducing the time an individual is exposed to high noise levels

Hearing Protection devices Cover or Go in the Ears to Block Noise:

Never use cotton, stereo headsets, or other makeshift hearing protectors. They don't protect your ears from noise.

- 1. **Earplugs** are inserted in the ear canal to seal noise out. They may be premolded or custom-molded reusable, or one-use or one-week-use disposables. Follow proper instruction to insert earplugs into the ear.
- 2. **Earmuffs** are the best protectors. They have a headband with cushioned plastic cups that cover each ear. They may feel bulky or uncomfortable in hot weather. In tight quarters, they can be an added problem.
- 3. **Canal caps** cover and seal the ear canal entrance with soft flexible pads on a lightweight headband. Though comfortable, they provide the least protection.
- 4. Earmuffs plus earplugs may be needed in some high-noise areas.

Inspect and Care for Hearing Protection Devices:

- 1. Inspect hearing protection before each use.
 - a. Don't use earmuffs or canal caps that are loose, cracked, or don't seal well.
 - b. Don't use earplugs that are cracked, misshapen, or hard and inflexible.
- 2. Wash hands thoroughly before inserting or putting on hearing protectors.
- 3. Clean hearing protection devices regularly, following manufacturer's instructions.
 - a. Warm, soapy water is often recommended.
 - b. Don't use alcohol, acetone, or other chemicals.
- 4. Store hearing protection devices where they'll stay clean and dry.

Report Hearing Problems:

- 1. Noise or ringing in the ears.
- 2. Trouble hearing voices or high or soft sounds.
- 3. Needing TV or radio volume so high that others complain.

Wear Hearing Protection for Off-the-Job Noise Exposure:

1. Power tools, chain saws, lawn mowers, garden tractors.

- 2. Hunting, shooting
- 3. Motorcycles, snowmobiles, rock concerts, car and motorcycle races.