Weekly Safety Meetings Premium Membership
Safety Training for the Construction Industry

Liberty Mutual Insurance
Volume 36 Issue 48 December 2, 2013

Welding

Whether you are a welder, or you just work close to where welding occurs, be aware of welding hazards and how to protect yourself. Welding creates health and physical hazards. Health hazards from welding operations include exposure to ultraviolet (UV) radiation and the presence of dangerous or toxic fumes. Some of the physical hazards are burns, eye damage, electric shock, cuts, and crushed toes and fingers. These hazards can be controlled with safe work practices and PPE.

Before you begin welding, protect yourself with the necessary PPE. Wear a welding hood to protect your face and eyes. Make sure that the filter lens in the hood is right for the type of welding and the current. Burns are a big problem. Wear protective welding gloves. They're heat resistant and long enough to protect your forearms from burns. You might need a leather apron or chaps to protect your legs. Make sure your pant legs cover the tops of your boots (even when you're sitting down). Don't roll up your sleeves or pants.

Keep gas cylinders in an upright position and secure them to prevent them from falling over. Never lift a gas cylinder by the valve protection cap. Remove regulators and replace protection caps when cylinders are not in use. Inspect cylinders, valves, couplings, regulators, and hoses regularly; thoroughly clean off all oil and grease. Keep cylinders away from heat sources. Never use oxygen to blow dust and debris off your clothes. Always close the valve when you're not using a cylinder, even if it's empty.

Take fire prevention seriously. Inspect the work area before you begin any welding work. Sparks can travel as far as 35 feet from the welding area. Look for flammable and combustible materials. Keep hoses and cylinders away from flames and heat so your work doesn't go up in flames. Keep a fire extinguisher nearby.

Remember these safety tips when welding:

- Keep arc-welding leads away from high-traffic areas so they don't create tripping hazards.
- Prevent carbon monoxide problems: locate welding machines so that engine exhaust gets vented safely to the outside of the building.
- Put up flash screens to prevent eye injuries to other workers in the area.
- Never leave a welding rod unattended in a stinger.
- Welders flip up their hoods after a weld so they can see to clean the weld, but that leaves their eyes exposed to flying pieces of slag or debris. Wear safety glasses or goggles under your hood.
- Don't look at a welding arc if you aren't wearing the right kind of eye protection. Looking at the arc without proper eye protection can cause flash burns on your eyes.

SAFETY REMINDER

We talked about welding, but most of the same hazards exist if you're cutting or brazing. Always work safely.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED MSDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.

Weekly Safety Meetings Premium Membership
Safety Training for the Construction Industry

Liberty Mutual Insurance
Volume 36 Issue 49 December 9, 2013

Have an Informed Response

If an accident occurred on the job today, would you know what to do? Despite the rules, regulations, training, planning, inspections, and protective equipment, accidents still happen. When something goes wrong, a quick and appropriate response may be necessary to save lives. This is why planning for accident response is so important.

Construction site accidents can be small and personal, or huge and very public. You should be evaluating the jobsite all the time. You should be thinking about the kinds of accidents that are most likely to occur, then thinking through how you will respond in each situation. Ask questions like these: Where are the two closest exits? Where can I find a fire extinguisher? What would I do if someone fell or got electrocuted? How should I help if someone gets buried in a trench? Who do I call first if there's a fire? Could I stop that machine if somebody got caught in it? What will I do when something goes wrong?

At all times, make sure that you:

- know who to call when an accident occurs.
- keep your first-aid training up to date.
- know where the nearest fire extinguisher is located, and how to use it.
- know where first-aid kits and other emergency supplies are located.
- know where the evacuation rally point is.
- know the plan for sheltering in place.

Most employers require everyone to go through a site-specific safety orientation. If you're like most construction workers, you've been through dozens of these orientation sessions. When you feel like nodding off, or when you get distracted by your cell phone, remember that the information being discussed could potentially save your life. Even if you already know it all, set a good example for others and listen attentively. You might even learn something new.

When an accident occurs, it's human nature to want to help. But sometimes it is best to stay back, at least temporarily. The first thing to do is to make sure that you aren't a potential victim. Next, evaluate the situation. If you're going to need help, call 911, use your radio, pull a fire alarm, or yell for a buddy to go get help. Then, think about whether it's safe for you to help. The structure could be unstable. There may be fire, downed power lines, or hazardous chemicals. Before you rush in to act, take a deep breath and figure out what's happening. If it's not safe, do not enter the area. If it is safe then let your training be your guide. Think carefully and act deliberately. You may need to perform CPR, provide first aid, put out a small fire, or simply keep others away and out of danger. Your informed response and well-thought-out actions can make a big difference in the outcome after an accident.

SAFETY REMINDER

Working with a positive safety attitude can reduce the likelihood of an accident. Make safety your priority.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED MSDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.

Weekly Safety Meetings Premium Membership
Safety Training for the Construction Industry

Liberty Mutual Insurance
Volume 36 Issue 50 December 16, 2013

Woodworking Machinery

Some of the woodworking machinery you might use on the jobsite could include circular, crosscut, and table saws; radial arm saws; jointers and planers; molding machines; sanders; and routers. Even if you're not a carpenter, you probably use some of these tools here or at home. All of these tools can be operated safely, but you need to know how to use them and how to protect yourself.

Remember that any fast-moving blade can amputate your finger in a split second. Make sure guards are in place and adjusted properly. Removing a safety device like a blade guard or wedging a guard so it's in an open position creates a very unsafe situation. On some woodworking machines, like table saws and planers, you move the stock instead of the tool. In these cases, keep your hands and fingers safe by using a push block or push stick to feed the stock. Keep belt and pulley guards in place at all times except when servicing the machinery. When you service a machine, remove or disconnect the power source. If you can't, then follow lockout procedures to properly lock out the machine.

Keep in mind the following safe work practices:

- Make sure that you really know how to use a tool or machine before you turn it on.
- If you have questions, ask your supervisor before you begin using the machine.
- Always inspect the tools and machines you use, especially if you share the tool with other people who may not be as careful as you are.
- Remove defective machines from service and tag them "do not use" so nobody else uses them before they are repaired.
- Never use your foot, leg, or knee as a work rest when using a saw or any tool.
- Check wood for nails and staples. Remove them before you cut the wood.
- Avoid nip points.
- Never wear loose clothing around rotating blades, belts, or pulleys.
- Always wear safety glasses or goggles when using woodworking machinery.
- Wear hearing protection. Almost every piece of woodworking machinery is noisy enough to require hearing protection.
- Wear gloves to protect your hands. Avoid the pain of splinters, even though they are minor.
- Eliminate tripping hazards. Keep your work area clean, well swept, and free from clutter. Keep power cords overhead or out of the way.
- Always shut down machines before walking away from them.

SAFETY REMINDER

Make sure that all cutting tools and blades are sharp and clean. Cutting will be easier and quicker, and your work will look a lot better.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED MSDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.

Weekly Safety Meetings Premium Membership
Safety Training for the Construction Industry

Liberty Mutual Insurance
Volume 36 Issue 51 December 23, 2013

Can You See 50 Micrograms?

As a construction worker, it's pretty likely that you've worked someplace where there was lead dust in the air. Lead dust can be inhaled when you breathe, or ingested into your body if it gets into your mouth. Either way, once the lead is in your system, it will move into your blood stream, and will eventually be deposited in your organs and other body tissues.

According to OSHA's Lead Standard, if there is lead dust where you're working, you're okay as long as you are not exposed to more than 50 micrograms of lead per cubic meter of air, averaged over an 8-hour period. But how do you know? **You can't see 1,000 micrograms of lead, let alone 50 of them.** And you can't taste lead in the air. What if you're not sure whether there is lead dust around? The only way you can be sure if the air contains dangerous amounts of lead is to use a testing device to measure airborne contaminants. If the job does have dangerous amounts of lead, you'll have to work according to the company's written lead compliance program.

What if you're doing a small job and don't have access to an airborne lead detector? Lead-based paint was banned for household use in 1978. So, if you're working in a home that was built before 1978, there is a good chance that the paint could contain lead. It could be underneath layers of oil or latex paint. You can purchase lead-test kits at the hardware store, but be aware that such kits are designed for homeowners and may not comply with OSHA workplace regulations.

Here are some construction operations that can generate lead dust and fumes:

- demolition or repair work
- cutting coated or painted steel with a torch
- welding coated or painted steel
- using heat guns, sanders, scrapers, or grinders to remove lead-based paint
- abrasive blasting of steel structures, especially outdoor structures like bridges and water towers

Getting lead in your system is a real health hazard. Short-term (acute) overexposure can cause severe brain dysfunction, which can kill you in less than a week. Long-term (chronic) overexposure can result in damage to your central nervous system, kidneys, reproductive system, and other body systems.

Just like with asbestos, often the best thing to do with lead is to leave it alone. When that's not possible, and you have to disturb it to get your job done, follow OSHA regulations on ventilation and use the right PPE to make sure that you don't inhale the lead dust, or bring it home to your family on your clothes.

SAFETY REMINDER

Firing ranges often have high concentrations of airborne lead from firearm discharge. Look for a range that has good ventilation and practices good housekeeping.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED MSDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.

Weekly Safety Meetings Premium Membership
Safety Training for the Construction Industry

Liberty Mutual Insurance
Volume 36 Issue 52 December 30, 2013

Material Handling

Construction work requires us to move, carry, place, hold, and store a lot of material. That means we do a lot of lifting, pushing, carrying, and reaching. Fortunately, there are many material handling devices that are available to help. Mechanical devices can be very helpful when moving materials that are heavy or bulky. They can make your job easier, and reduce physical strain and stress. However, this equipment can also pose risks when it's not used safely.

Here are some safe work practices for using material handling devices:

- Never use any equipment until you have been trained and feel confident that you know how to use it.
- Inspect the equipment for defects and worn parts. Never use defective equipment.
- Wear gloves and safety shoes.
- Be sure that hand trucks have knuckle guards to reduce hand injuries.
- Always use proper lifting techniques when lifting any load onto a mechanical device.
- Never overload any mechanical lifting device.
- Don't move a load unless it's well balanced.
- Don't allow the load to obstruct your view ahead.
- When using a conveyor, be sure all moving parts are guarded so you don't get caught in a pinch point. Never ride on a conveyor.
- Know the locations of emergency stop buttons.
- Never operate a crane unless you have been trained and certified to do so.
- When operating a crane, never overload it.
- Do not swing loads over workers.
- If you are working near a crane, never stand underneath a load.
- Avoid driving a forklift over loose objects or on uneven surfaces.
- Drive slowly when you operate a forklift on wet or slippery surfaces. Turn corners slowly and carefully. Honk the horn at blind corners.
- Never drive a forklift close to anyone standing near a fixed object.

If you move materials improperly, you are asking for injuries. **Sprains and strains** happen when you lift improperly or carry a load that is too large or heavy for you. **Bruises and fractured bones** can occur if you get hit by poorly stacked materials that fall. **Crushing injuries or injuries from being caught in a pinch point** happen when people set up or use lifting equipment incorrectly or carelessly.

Think about how you move materials. Work safely to prevent accidents and injuries.

SAFETY REMINDER

Never exceed your own lifting capacity.

NOTES:

SPECIAL TOPICS /EMPLOYEE SAFETY RECOMMENDATIONS/NOTES:

S.A.F.E. CARDS® PLANNED FOR THIS WEEK:

REVIEWED MSDS # SUBJECT:

MEETING DOCUMENTATION:

JOB NAME:

MEETING DATE:

SUPERVISOR:

ATTENDEES:

These instructions do not supersede local, state, or federal regulations.