



NSF SAFETY DEPARTMENT

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SAFETY & HEALTH NEWSLETTER



The Hazards: SCAFFOLD SAFETY

Each year, more than 60 workers are killed by falls from scaffolds, about 1 in 5 of the fatal falls in construction. Besides problems with planks and guardrails, the main causes of injuries and deaths on scaffolds are poor planning for assembling and taking them apart, missing tie-ins or bracing, loads that are too heavy, and being too close to power lines. Also, falling objects can hurt people below scaffolds.



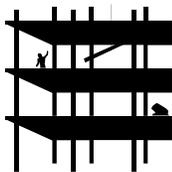
Protect Yourself

Scaffolds are supported (usually by posts/beams and legs) or suspended (by ropes).

- OSHA says a scaffold must be designed by a qualified person. Supported scaffolds must be able to support their own weight and at least 4 times the maximum intended load.
- OSHA says a competent person must inspect a scaffold before each work shift and after anything happens that could affect the structure. The competent person should be trained in scaffold safety.
- A competent person must supervise if a scaffold is assembled, changed, moved, or taken apart.
- Power lines: Keep scaffolds 10 feet or more from power lines (or 3 feet, if lines are less than 300 volts), unless you are sure the power lines are de-energized.
- Weather: You cannot work on a scaffold in high winds or a storm unless a competent person says it is safe ~ you use personal fall-arrest or a windscreen. (If you use a screen, the scaffold must be secured against the expected wind force).

Guidelines for checking a scaffold

- > If a scaffold is more than 2 feet above or below a level, there must be a way to get on or off -such as a ladder, ramp, or personnel hoist. The way to get on or off must not be more than 14" away from the scaffold.
- > Put a standing scaffold on a firm foundation (with base plates attached to feet)- for instance, with one piece of wood under each pair of legs (across the shortest distance), extending at least 1 foot past each leg.
- > Uprights must be vertical and braced to prevent swaying; platforms must be level.
- > A scaffold that is more than 4 times higher than its base is wide must be tied to supports.
- > Most scaffold platforms and walkways must be 18" wide or more. If a work area is less than 18" wide, guardrails and/or personal fall-arrest must be used.
- > Ten-foot planks must extend at least 6" past the end supports, but not more than 12"; no more than 1" between planks or between planks and uprights.
- > Wood planks must be unpainted, so any cracks will show.



There must have a qualified person provide safety training for each worker who uses a scaffold. A competent person must give safety training to any worker who assembles, takes apart, moves, operates, repairs, maintains, or inspects scaffolds. If the worksite changes or the type of scaffold or safety equipment changes, workers using scaffolds must be retrained.

Carbon Monoxide

What Is It...Carbon monoxide (CO) is an odorless, colorless gas that interferes with the delivery of oxygen in the blood to the rest of the body. It is produced by the incomplete combustion of fuels.



Carbon monoxide is produced as a result of incomplete burning of carbon-containing fuels including coal, wood, charcoal, natural gas, and fuel oil. It can be emitted by combustion sources such as un-vented kerosene and gas space heaters, furnaces, woodstoves, gas stoves, fireplaces and water heaters, automobile exhaust from attached garages, and tobacco smoke. Problems can arise as a result of improper installation, maintenance, or inadequate ventilation.

The Health Effects

Carbon monoxide interferes with the distribution of oxygen in the blood to the rest of the body. Depending on the amount inhaled, this gas can impede coordination, worsen cardiovascular conditions, and produce fatigue, headache, weakness, confusion, disorientation, nausea, and dizziness. Very high levels can cause death. The symptoms are sometimes confused with the flu or food poisoning. Fetuses, infants, elderly, and people with heart and respiratory illnesses are particularly at high risk for the adverse health effects of carbon monoxide.

An estimated 1,000 people die each year as a result of carbon monoxide poisoning and thousands of others end up in hospital emergency rooms.

What Can Be Done to Prevent CO Poisoning?

- ☞ Ensure that appliances are properly adjusted and working to manufacturers' instructions and local building codes.
- ☞ Use proper fuel in kerosene space heaters.
- ☞ Do not use ovens and gas ranges to heat your home.
- ☞ Do not burn charcoal inside the room, workshop, cabin, recreational vehicle, or camper.
- ☞ Make sure stoves and heaters are vented to the outside and that exhaust systems do not leak.
- ☞ Do not use un-vented gas or kerosene space heaters in enclosed spaces.
- ☞ Never leave a car or lawn mower engine running in a shed or garage, or in any enclosed space.
- ☞ Make sure your furnace has adequate intake of outside air.

What If I Have Carbon Monoxide Poisoning?

Don't ignore symptoms, especially if more than one person is feeling them. If you think you are suffering from carbon monoxide (CO) poisoning, you should:

- Get fresh air immediately. Open doors and windows. Turn off combustion appliances and leave the house.
- Go to an emergency room. Be sure to tell the physician that you suspect CO poisoning.
- Be prepared to answer the following questions: Is anyone else in your department complaining of similar symptoms? Did everyone's symptoms appear about the same time? Are you using any fuel-burning equipment/appliances in your area? Has anyone inspected your equipment lately? Are you certain they are working properly?

Carbon monoxide detectors should meet Underwriters Laboratories Inc. standards, have a long-term warranty, and be easily self-tested and reset to ensure proper functioning.

The Ten Commandments of Good Safety Habits

In most everything we do, we find a "trick" to make the process easier and faster. After we develop these tricks, they become work habits in our everyday activities. Developing everyday safety habits can keep you injury free through the year. Here are ten safety habits to live by:

- ✓ **Set Your Own Standards.** Don't be influenced by others around you who are negative. If you fail to wear safety glasses because others don't, remember the blindness you may suffer will be yours alone to live with.
- ✓ **Operate Equipment Only if Qualified.** Your supervisor may not realize you have never done the job before. You have the responsibility to let your supervisor know, so the necessary training can be provided.
- ✓ **Respect Machinery.** If you put something in a machine's way, it will crush it, pinch it or cut it. Make sure all guards are in place. Never hurry beyond your ability to think and act safely. Remember to de-energize the power first before placing your hands in a point of operation.
- ✓ **Use Your Own Initiative for Safety Protection.** You are in the best position to see problems when they arise. Ask for the personal protective equipment or additional guidance you need.
- ✓ **Ask Questions.** If you are uncertain, ask. Do not accept answers that contain, "I think, I assume, I guess." Be sure.
- ✓ **Use Care and Caution When Lifting.** Most muscle and spinal injuries are from overstraining. Know your limits. Do not attempt to exceed them. The few minutes it takes to get help will prevent weeks of being off work and in pain.
- ✓ **Practice Good Housekeeping.** Disorganized work areas are the breeding grounds for accidents. You may not be the only victim. Don't be a cause.
- ✓ **Wear Proper and Sensible Work Clothes.** Wear sturdy and appropriate footwear. These should enclose the foot fully. Avoid loose clothing, dangling jewelry, and be sure that long hair is tied back and cannot become entangled in the machinery.
- ✓ **Practice Good Personal Cleanliness.** Avoid touching eyes, face, and mouth with gloves or hands that are dirty. Wash well and use barrier creams when necessary. Most industrial rashes are the result of poor hygiene practices.
- ✓ **Be a Positive Part of the Safety Team.** Willingly accept and follow safety rules. Encourage others to do so. Your attitude can play a major role in the prevention of accidents and injuries.



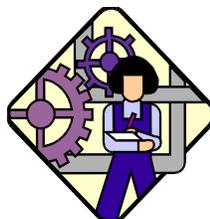
Never:

- > Never ignore or neglect safety rules
- > Never get complacent about your work.
- > Never assume accidents only happen to others
- > Never drive or operate machinery under the influence of alcohol or drugs.
- > Never take chances with the life and health of yourself or your coworkers.



Remember this:

It takes a minute to write a safety rule. It takes an hour to hold a safety meeting. It takes a week to plan a good safety program. It takes a month to put that program into operation. It takes a year to win a safety award. It takes a lifetime to make a safe worker. But it takes only a second to destroy it all- with one accident, Takes time now to work safe and help your fellow employees to be safe, too!



Working Safely with MWF's

They are found in just about every machine shop or maintenance department in this island and are used regularly in manufacturing, assembly, metal grinding, boring, drilling, and turning.



They are metalworking or machining fluids, often called **MWFs**, and they are used to reduce friction between cutting tools and work surfaces and to remove scrap from those surfaces during machining operations.

While MWFs are very helpful substances because of their coolant, lubricant, and corrosion-resistant properties, they do have the potential to cause some health problems. High-speed, high-friction metalworking generates mists of MWFs that can cause respiratory problems if inhaled. The mist can also cause skin problems like contact dermatitis and similar allergic reactions.

Large numbers of workers are exposed to MWFs every day on the job. That's why it's important for everyone who works with MWFs to know how to work with them safely.

Techniques to Lessen Exposure

The National Institute of Occupational Safety and Health recommends these ways to lessen contact with MWFs:

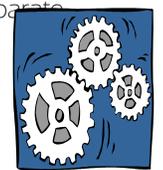
- ★ Engineering controls such as splash guards and enclosures.
- ★ personal protective equipment.
- ★ Local exhaust ventilation and mist-control filtration systems
- ★ Good personal hygiene and housekeeping practices.

Tips for Working Safely with MWFs

There are a number of effective work practices that employees can follow to lessen their exposure to these fluids:

- ⇒ Workers should read the material safety data sheets so they understand what type of metal working fluids are used in their facility.
- ⇒ Eye protection should be worn when working with MWFs, and an eye flushing facility should be readily available.
- ⇒ Contact with the skin can be avoided by wearing appropriate personal protective equipment.
- ⇒ Hands should be washed promptly after any exposure and before eating, drinking or smoking. Touching of the face should be avoided on the job.
- ⇒ Work clothes should be washed separately from other clothing.
- ⇒ Splashguards should be provided on machines for protection.
- ⇒ Adequate ventilation should be maintained in work areas.
- ⇒ Employees should report any symptoms of illness, such as respiratory or dermatitis effects, to the supervisor.
- ⇒ Machinery should be given regular thorough cleanings.
- ⇒ Rags with MWFs should be disposed of in separate containers.

If workers follow safety precautions, and if machines are properly maintained, any potential hazards in working around machine

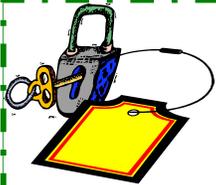


6 Common Workplace Hazards

Many times we can overlook the obvious when it comes to preventing accidents at work. There are risks that can cause mishaps at the workplace in our everyday life.



1. **SLIPS.** Clean up spills immediately and be careful when walking on highly polished floor.
2. **TRIPS and FALL.** Cleaning walkways of boxes and other obstacles can prevent most trips and falls, but remember to close filling cabinet drawers, too. Also, watch for loose matting or carpet tiles. Be extra careful going up and down stairs when you're in a hurry. Steady yourself on stepladders, and don't use chairs, boxes or your desk in place of a ladder or stepstool.
3. **FIRE.** Fire is a major hazard in any workplace. Hazards include stacked papers, faulty wiring or other electrical faults, overheating equipment and chemical reactions. Know where all fire exits and extinguishers are located.
4. **CHEMICALS.** There are all types of chemicals that can cause harm, from photocopy and printer chemicals to the more dangerous acids used in many industries. Use caution and protective gear when appropriate, and make sure equipment such as printers is properly ventilated.
5. **NOISE.** Prolonged exposure to workplace equipment noise can damage hearing. Make sure you wear ear protection if your job requires you to be around or use noisy equipment. Exposures of 8 hours per day to noise levels above 85dB(A) may produce permanent hearing loss over the years.
6. **INDOOR POLLUTANTS.** Carbon monoxide, carbon dioxide, smoke, fumes and microbes such as bacteria and fungi from ventilation systems can cause many types of illnesses. Keep a clean workroom, office and eliminate sources of contamination by using non-toxic, non-aerosol cleaners.



*Tag-out procedures shall be strictly enforced at all times.
Tag-out applies to normal operations as well as during repair, testing or maintenance.*

Sources:

OSHA, NY Committee for Occupational Safety and Health
National Safety Council
Safety Talks
Navy Safety Center, POD Notes

Hurry Can Hurt

In the same way that racecars are marked with racing stripes, people who race on the job are marked with cuts, bruises and bandages. Almost all of us have been guilty of racing through a job at one time or another. Here is some hurry up acts. Let's see which ones we've practiced lately:



- > Didn't wear safety glasses because the job would only take a few minutes,
- > Used the wrong ladder because the proper one was too far away
- > Didn't use the proper lockout procedures because no one was around and it was easy to fix alone
- > Took a short cut between machinery and stockpiles of materials,
- > Used a wrench instead of a hammer because the hammer was in the toolbox on the other side of the room
- > Climbed a ladder with a pocket full of tools because the tool belt had been forgotten
- > Cut the grounding prong of a three-way ground wire plug because there wasn't an adapter
- > Removed a guard to repair the machine or prepare it for a special run and didn't get around to putting it back yet
- > Reached just a little bit further on the ladder because there wasn't time or energy to get down and move it; -didn't unplug a power tool before making adjustments because it would only have to be plugged in again anyway;
- > Used a dull saw blade for just one more cut
- > Gave a forklift truck just a little more pedal so one more load would be done before lunch
- > Laid a board full of nails down with the fun intention of bending the nails over in a minute
- > Climbed up the side of a bin instead of getting a ladder, or
- > Didn't slow down at a blind corner this time because no one has been there before.

Do any of these sounds familiar? Or are there other people doing these things? Often when we race through a job, nothing bad happens. Sometimes we may experience a "near miss." However, eventually a serious injury will happen because it is only a matter of time. Is it worth risking our eyes, our limbs or our life or someone else's to save a few minutes on the job?



When we hurry up on the job we are often not only speeding up our work but speeding up our chances of having an accident. Hurry up can hurt!

Remember, practice safety -- don't learn it by accident!

THE FOLLOWING IS THE SAFETY DEPARTMENT'S ACTIVITIES FOR NOVEMBER 2003:

- Enlisted Safety Committee Meeting – 6 Nov 03, 1500H @ NSF Conference Rm.
Target audience: All Safety Representatives
- Safety Representatives Briefing – 19 Nov 03, 1330H @ B-331 NSF Safety Training Room
Target Audience: All newly designated Safety Representatives
- Hazardous Materials Coordinator's Briefing - 20 Nov 03, 1330H @ B-331, NSF Safety Training Room.
Target Audience: All newly designated HazMat Coordinators
- Nov 2003 Occupational Safety & Health (OSH) Inspection: NSF Weapons (Ammo Storages/ Armory/ Air Ops/ Donkey Gate)
- Island Indoctrination Class (Safety) – Bi-weekly, 0915H@ Acey Deucey Room, Turner Club Complex.
Target Audience: All new personnel (mandatory for Officers, enlisted and civilian personnel).

KNOW YOUR SAFETY STAFF:



Ronald W. Thornhill - Safety Officer
Dave D. Cruz - Safety Specialist
Roy F. Villanueva - Safety Specialist
Marilyn S. Satsatin - Safety Technician

There's always room for improvement.
Visit us at <http://ice.disa.mil> and tell us how we can improve the island's safety program.

Need to report a Safety Hazard?

Call the NSF Safety Office at [370-4123](tel:370-4123) or send email to the Safety Officer at thornhillr@dg.navy.mil