



Safety Training Topics

June 2024

Boating Safety

Bonfire, Grill and Fire Pit Safety

Fall Protection

Fire Prevention

Hearing Protection

SAFETY TRAINING TOPIC

Boating Safety

Hundreds of people are killed each year in recreational boating accidents. During the summer months it is likely that you and or your colleagues will be on a recreational water-vehicle. Here are some safety tips to follow if you plan on being out on the water.

First, always check local weather conditions and forecasts before taking a boat out. If you observe darkening clouds, volatile or rough waters, changing winds or sudden drops in temperature, return to shore immediately.

Before taking a boat you must inspect the vehicle to ensure that it is safe for use. You should ensure that there is a fire extinguisher on board and enough life vests for each passenger on the boat. It is also important that more than one person on board is familiar with all aspects of the boat's handling, operations and features. In the event that the operator is injured or incapacitated in any way, it's crucial that someone else can get everyone back to shore safely.

Once on the water it is imperative to use common sense. This means always operating at a safe speed (especially in crowded areas), being alert at all times and steering clear of large vessels and watercraft that may have difficulty stopping or turning. You should also always adhere to buoys and other navigational aids.

The likelihood of being involved in a boating accident drastically increases when alcohol is involved. Avoid drinking alcohol while boating at all costs. It can be deadly, not to mention it's illegal.

You should also be able to swim. A large part of safe boating means you can swim in the event your boat capsizes or you fall into the water. Familiarize yourself with any state laws and regulations, prior to operating a boat. Regardless of your state's requirements, it's always important to be educated. Consider taking a boating safety course, even if you are not required to do so.

Finally, you should also consider getting a free vessel safety check. The United States Coast Guard offers complimentary boat examinations to verify the presence and condition of certain safety equipment required by state and federal regulations. They'll provide a specialist to check out your boat and make helpful boating safety tips and recommendations.

REVIEW AND DISCUSSION

- Why should you have more than one person on board is familiar with all aspects of the boat's handling, operations and features?

SAFETY TRAINING TOPIC

Bonfire, Grill and Fire Pit Safety

During the summer months you are likely to use or be around bon-fires, propane and charcoal grills and fire pits. These can all be extremely dangerous if not used properly. Here are a few safety tips to follow to prevent fires and injuries from occurring.

When using any type of grill only do so outdoors. Always have them positioned away from siding, deck railings and out from under eaves or overhanging branches. Grills must be kept a safe distance from lawn games, play areas and foot traffic. As a general rule of thumb a three-foot "safe zone" around the grill should be established. When cooking, use long-handled grilling tools to provide adequate clearance from heat and flames when using the grill. You should also periodically remove grease or fat buildup in trays below the grill to prevent fires from occurring.

In the event, you are using a charcoal grill, always purchase the proper starter fluid and store out of reach of children and away from heat sources. Never add charcoal starter fluid when coals or kindling have already been ignited. Do not use any flammable or combustible liquid other than charcoal starter fluid to light the fire.

Prior to using a propane grill, check the propane cylinder hose for leaks. You can do so by using a light soap and water solution applied to the hose. This will reveal escaping propane quickly by releasing bubbles. You must replace any damaged cylinder or hose before use,

When using a fire-pit, make sure to never use flammable fluids such as gasoline, alcohol, diesel fuel, kerosene, and charcoal lighter fluid to light or relight fires. Do not burn trash, leaves, paper, cardboard, or plywood. Avoid using soft wood such as pine or cedar that likely pop and throw sparks.

If you are building a bonfire never do so in dry conditions or if the campground and area rules prohibit fires. If there is not an existing fire pit, and pits are allowed, look for a site that is at least fifteen feet away from tent walls, shrubs, trees or other flammable objects. Also beware of low-hanging branches overhead.

When you're ready to put out your, follow these guidelines:

- Allow the wood to burn completely to ash, if possible.
- Pour lots of water on the fire; drown all embers, not just the red ones.
- Stir the campfire ashes and embers with a shovel.
- Scrape the sticks and logs to remove any embers.
- Stir and make sure everything is wet and they are cold to the touch.
- If it is too hot to touch, it's too hot to leave

Finally when being around any type of fire it is a good idea to have an appropriate rated fire extinguisher in reach!

REVIEW AND DISCUSSION

- What should you do prior to using a propane grill?

SAFETY TRAINING TOPIC

Fall Protection

SOME FACTS

Fall-related accidents account for about 10% of all workplace fatalities. Nearly all of the fall accidents on record were preventable.

Ways of protecting yourself include hazard elimination, fall protection, and work procedures.

HAZARD ELIMINATION

The most effective way to deal with fall hazards is to eliminate them. For example, if you can lower a light to replace its lamp and then raise the light back up, you have eliminated the hazard.

Partial elimination is the second most effective way. For example, if you can pre-assemble items before going up in a lift or up on a ladder, you will spend less time being vulnerable to a fall.

FALL PROTECTION

You can't always eliminate a fall hazard, and partial elimination still leaves you with a hazard. Fall protection, as defined by the fall protection industry, is a passive way of preventing you from falling.

Fall protection examples are all around you. These include ladder cages, platform railings, and secured hole covers.

FALL RESTRAINT

This is what most people think of, when they think of fall protection.

It involves the use of a secure anchorage and a lanyard connected to your full body harness. The lanyard allows you to reach the work area, but prevents you from falling too far.

Fall restraints require you to have training in the proper use and inspection of your equipment.

WORK PROCEDURES

Some situations make fall protection and fall restraint measures impractical or impossible.

The idea of changing the work procedure is not to find a cheaper way of protecting against the fall. The idea is to rethink the work process so fall protection measures become practical, possible, or unnecessary.

You may need to help change the procedure or find a way to eliminate the task completely. Your input is valuable, as you are the one doing the work.

SAFETY HARNESS INSPECTION

When using fall restraint devices, you must inspect them. Look for fiber damage, pulled stitches, or frayed edges. Examine D-rings, grommets, rivets, buckles, tongues, and straps.

LANYARD INSPECTION

Look for fiber damage, pulled stitches, or frayed edges. Inspect the snaphooks, carabineer, and any other mechanisms.

If it is a retractable lanyard, ensure the back nuts and rivets are tight.

If it is a retractable lanyard, test for smooth operation and proper locking.

ANCHORAGE POINTS

Before attaching to an anchorage point, look for cracks, sharp edges, or evidence of abuse.

In a particularly dangerous area, you will need to attach to a new anchorage point before un-attaching from the one you are attached to.

Do not attach to guardrails, C-clamps, ladders, conduit, light fixtures, rebar, plumbing, roof stack, or any object that you aren't sure can support your weight plus the force of your fall. Anchorage points must be capable of supporting 5,000 pounds per person because of the forces generated from the impact of a fall.

REVIEW AND DISCUSSION

- If there are ten people in your crew, how many are statistically likely to die from a preventable fall accident?
- What are three ways of protecting yourself from falls?
- What are some examples of how might you eliminate or partially eliminate a fall hazard?
- What is fall protection, as defined by the fall protection industry, and what are some examples?
- What is fall restraint, and what are some examples?
- What kind of training do you need if you are going to use fall restraint equipment?
- What is the purpose of changing work procedures?
- How do you inspect a harness?
- How do you inspect a lanyard?
- What do you need to know about attachment points?

SAFETY TRAINING TOPIC

Fire Prevention

FACTS AND FIGURES

Workplace fires and explosions kill more than 200 workers each year and injure another 5,000.

21.5% of industrial fires are from electrical causes.

Smoking causes 17% of industrial fires, while cutting and welding cause 5.5%.

PREVENTION STEPS

Use the proper circuit protection on equipment. Never bypass protection "just this once." Temporary bypasses are easily forgotten and are too dangerous even when they are not forgotten.

Smoking is the number two cause of industrial fires. It is the number one cause of premature baldness and male impotence. It is a leading cause of cancers of the bones, bladder, testicles, bowels, brain, tongue, and lungs. It is a leading cause of heart attacks, emphysema, and other illnesses. Think about this when you decide to light up. If you light up in the workplace, you endanger everyone.

To reduce the fire danger from smoking, smoke only in approved areas and use the ashtrays provided. A carelessly flicked ash or tossed butt can easily roll under an ignitable and cause a fire. It is also easy to ignite a trail of fuel fumes, which can then ignite the fuel from a considerable distance.

Pick up all food wrappers, beverage containers, napkins, and other disposable items used at meals and breaks. Dispose of them properly to prevent attracting rodents and insects.

Clean up any oil, fibers, or dust on or around equipment and machinery.

If an oil spill is too big to clean up easily, report the spill to your foreman. If you must leave the area to report the oil, leave some kind of marker-an oil pig or other absorbent material is sufficient-so others can see the spill.

If fueling a portable generator or heater, use an approved fuel can and dispenser. Do not, for example, use a paper funnel when adding fuel. Try to do the refueling outside, away from ignition sources.

Store flammable and combustible materials in appropriate containers away from heat sources. For example, place touch-up paint in yellow lockers made for storing such materials.

Dispose of flammables-solvents, fuel, oil, and the like-according to established guidelines. Most likely, this will be in a container just for flammables.

Dispose of ignitables – paper, cloth, cardboard, and the like – according to established guidelines. Most likely, this will be in a regular trash container. Never leave open flames unattended.

Before using spark-producing equipment, such as a welder, ensure the work area is free of flammables.

Before using flame-producing equipment, such as a cutting torch, ensure the work area is free of ignitables.

Arsonists are a reality. Support suspicious activity to your foreman and to security.

FIRE HAPPENS

Keep fire exits and escape routes clear and well-marked.

Know the location of alarm boxes and fire extinguishers.

REVIEW AND DISCUSSION

- What is the number one cause of industrial fires?
- What are some ways to prevent electrical fires?
- What is the number two cause of industrial fires?
- What are some cautions about smoking?
- Why shouldn't you eat in electrical rooms?
- What should you do about oil leaks?
- What should you do about small oil spills? Big ones?
- What are some cautions about fueling portable equipment?
- Where should you store flammables?
- What is the difference between fire prevention and fire protection?

SAFETY TRAINING TOPIC

Hearing Protection

Hearing loss is a major preventable health problem. Damaged hearing reduces your ability to communicate on the job, and it results in social and marital problems. There is no sense in leaving yourself open to a personal loss.

Many of us assume that wearing foam ear plugs when the sign tells us to "wear hearing protection" is all we need to do to protect our ears. This isn't true. Ear plugs are just one form of ear protection, and areas with signs requiring hearing protection are just one situation where you should wear ear protection.

Many of us assume hearing protection and ear protection are the same. This isn't true. Ear protection is more inclusive than hearing protection, but ear protection equipment doesn't necessarily provide hearing protection and vice-versa.

Many of us assume hearing loss is a natural result of aging. This isn't particularly true. Hearing loss due to excessive noise is preventable.

Many of us assume we can always get a hearing aid, so hearing loss isn't important. This isn't true. Hearing aids do not provide the same quality of hearing that undamaged ears do.

Many of us assume that if we have passed a hearing test we don't need to worry about our hearing. This isn't true. Hearing tests don't catch damage until it has happened, and standard hearing tests are not comprehensive enough to catch all damage that does occur.

Wear hearing protection whenever you must raise your voice to carry on a normal conversation.

Wear hearing protection whenever you are around machinery that could start without notice and alarm systems that are likely to go off.

You should wear hearing protection whenever the noise levels exceed OSHA limits on or off the job. Damage can occur even when you are having fun. Wear hearing protection any time you operate a firearm.

Personal hearing protection includes roll-able foam plugs, molded plugs, over the ear muffs, or other devices.

Do not wear ear plugs if you are at risk for an arc blast. The concussion could drive those plugs into your ears and render you permanently deaf.

Environmental hearing protection includes noise shields, soundproofing, restricted access, and closed doors. If you find any of this hearing protection damaged or not functioning properly, report it to your foreman.

Noise isn't the only thing that can damage the inner ear. Be careful when blowing your nose. In addition to damaging your inner ear, excess pressure can rupture your nasal membrane.

REVIEW AND DISCUSSION

- What are some reasons ear protection and hearing protection are important?
- Are hearing protection and ear protection the same?
- Is hearing loss primarily a consequence of aging, or is it preventable?
- Why should you preserve your hearing?
- If you passed a hearing test, are your ear protection worries over?
- When should you wear hearing protection?
- Name some forms of personal hearing protection?
- Name some forms of environmental hearing protection?
- What are steps you can take to prevent hearing loss?