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## 3 Ways to Get Employees to Follow Safety Rules

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The best way to get employees to follow safety rules are: scarcity, authority, and consensus. It's all about psychology. The good news is it's easy to teach. You do not need a degree.

### Scarcity:

Whether it comes from a conference, a peer or something you've read in a newsletter or online, when you get new information about safety, the key is to use it quickly, or lose it. The newer the information is the more valuable it's perceived to be by the recipients. So frame it that way.

### Authority

People are more likely to believe credentialed experts. If you're new to a company and don't have time to build credibility its okay. You have to show recipients of your message that you're knowledgeable and trustworthy.

One way to build trust quickly is to mention a weakness before your most powerful argument. Resist the human tendency to do the opposite – to bring in your biggest guns blazing right away and gloss over weaknesses.

### Consensus

If you're not getting 100% compliance on workers wearing

PPE and you're introducing a program to achieve that.

It's human nature for many to say, right out, the reason for the meeting. However, many employees will be defensive and feel as if one doesn't wear PPE then they shouldn't have to either. It's the opposite effect of what you want.

You will need to take a psychological approach. A better approach would be: "The vast majority of people who do the same task as you are wearing their PPE." And it's not only important to say most others are doing it; you should include that these are "workers like you." This approach has been proven in recent studies.

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## Storing Flammable Liquids

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The Chemical Safety Board has new recommendations for companies that handle nonconductive flammable liquid.

CSB recommends companies:

- ◇ Obtain more detailed information on the liquids from manufacturers that may not be contained on material safety data sheets
- ◇ Purge storage tanks with an inert gas to remove oxygen
- ◇ Add anti-static agents to the liquids

- ◇ pump liquids more slowly, and
- ◇ verify that storage tank level floats are effectively bonded.

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## Idle Equipment

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A recent report on major industrial fire shows even equipment that's out of service still needs to be regularly checked and maintained.

The underlying cause of these fire's are the lack of an effective program to identify and freeze-protect out of service or infrequently used piping and equipment.

Emergency isolation valve procedures should be in place to avoid equipment fires.



Publisher: Building Industry  
Employers of New York State  
Jack Endryck, Managing Director  
1-800-344-1841

Editor: Construction Industry  
Services Association, Inc. (CISA)  
1-585-586-1564

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# MONTHLY TOOLBOX TALK

## WELDING SAFETY

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Welding and cutting are inherently dangerous operations; but they can be performed safely when the proper precautions are taken and procedures are followed. We'll discuss some of the hazards associated with gas welding and electric arc welding. In most cases, these same hazards exist during cutting operations.

Welding is the fusing together of pieces of metal through the application of heat; arc and gas welding are the most common. Today we'll focus on arc welding hazards, although many of them are present during gas welding also. Common hazards include burns and fires from hot metal and sparks, eye and skin damage from infrared and ultra-violet radiation, and exposure to noxious fumes and gases. Most of these hazards can be controlled or avoided by wearing the proper personal protective equipment, staying alert, and inspecting the area before and after welding.

First, let's consider gas welding. The two most commonly used welding gases are oxygen and acetylene. These gases are stored in compressed gas cylinders and delivered to the torch through a series of valves, regulators, couplings, and hoses. The cylinders can be very dangerous by themselves; always secure them so they cannot tip over. It is very important to prevent leaks in the hoses, couplings, valves, etc. Even a small oxygen leak could saturate your clothes with oxygen; one spark and poof – you go up in smoke. Take the extra time to ensure that all of the equipment is in good working order and is properly assembled.

Arc welding uses a strong electric current to generate the heat necessary to melt and fuse the materials. When the current is applied, a very bright arc or spark is produced. The radiation emitted by the arc can cause severe damage to the eye. It is therefore, important to protect your eyes from the arc. If you are welding, make sure that the filter in your hood is dark enough; welding heavier pieces generally requires the use of darker filters.

When you're welding you should have your hood down to protect your eyes. Unfortunately, that hood makes it impossible for you to see other operations and dangers around you. You need to be aware of what else is going on in your area, especially if you

are welding near moving or dangerous equipment. If necessary, use a spotter. Fire is an ever-present danger when welding. Always have a charged fire extinguisher handy. It may even be necessary to have another person on fire watch.

Always wear appropriate protective equipment when you're welding or exposed to a welding operations. As discussed before, start with eye and face protection: use a welding hood with the proper filter lenses installed to protect you from the ultraviolet radiation of the arc. That ultraviolet light can actually give you a "sun" burn if your skin is exposed, so you should wear long sleeves. Protect your hands by wearing a good pair of welder's gloves. Your pant legs should cover the tops of your boots even when you're sitting down.

Welding often produces irritating and sometimes toxic fumes; a respirator may be needed to protect you from these fumes. Some of the most dangerous fumes are produced when welding or cutting metals containing cadmium, zinc, and lead. Always wear the necessary PPE. Ask your supervisor if you have any questions about what PPE is needed.

The threat of fire is always present during welding and cutting operations. If a hot work permit is required make sure you get one before you start working. Before you do any welding, check the area for anything that could cause a fire: flammable liquids and gases, explosive materials, cardboard. Find a safe way to run your leads so they don't create a tripping hazard. Check for your finished welding, make sure you put away your leads; don't leave them lying around where someone could trip over them. Finally, a stray spark or piece of smoldering debris could cause a fire later. Don't let that happen on your job. Always inspect the area before leaving. You should always keep a fire extinguisher nearby. Some companies require another employee to oversee the operation and watch for fires.

Many of the hazards we've discussed endanger anyone who is working near the welder. Even if you don't weld, it is very important that you recognized these hazards and take steps to protect yourself from injury.

**Matches or burning paper should not be used for lighting a welding torch – use a spark lighter instead.**