

# STRUCTURAL BUILDING COMPONENTS MAGAZINE

March 2005

## Safety Issues You Won't Need a Wizard to Fix by Molly E. Butz

*What are the top five safety issues you contend with? Take action to prevent accidents and careless behavior before it's too late.*

As this issue approached, SC staff thought it might be interesting to ask component manufacturers to reveal the "number one safety issue in their plant," via a new approach called our One Minute Poll (OP). The responses were plentiful and the results were eye-opening. Please note that the safety information contained in this article comes primarily from the WTCA Operation Safety program, an excellent safety resource designed specifically for component manufacturers.

### SPLINTERS, CUTS AND LACERATIONS

Splinters, cuts and lacerations were at the top of the list with 51 percent of the respondents. Gloves and a certain amount of caution should be used when handling lumber, plates, banding/strapping and other potentially dangerous materials. The solution seems obvious. Truss plants are in constant motion and, in order to maintain a safe work environment, proper personal protective equipment (PP) must be worn at all times. (This is, of course, more easily said than done, especially when you tell "Jimmy" at least once a day to put his safety glasses back on!)

That said, there are some things that can help you ensure your employees actually wear their PP when necessary. To begin with, consider the hazard carefully, in this case splinters or plate cuts, and choose the correct PP to match. Gloves are a natural solution; however, it's important to make sure the gloves do not increase or create other health or safety hazards. In addition, ask your employees if the PP fits comfortably or choose a style that can be adjusted. If PP is uncomfortable, it is less likely that it will be worn regularly if at all. Don't hesitate to spend the money it takes to get a useful, comfortable glove. If it means they will get used, it's worth it in the long run! If you're at a loss and need some help in choosing the "perfect" glove, your safety product suppliers should be able to advise on the features and benefits of different products. (See Safety Scene, September/October 2004 for a list of gloves types.)

Once you've established which glove style(s) you'll be using, do a quick training session over a brown bag lunch. Yes, gloves are a fairly simple piece of you'll, but your employees still need to understand how the gloves should fit. This will also give you the opportunity to talk about maintenance and replacement issues as damaged PPE will not serve its purpose and should be fixed or replaced. It will also allow you to get feedback on all of the issues that your employees are having concerning their gloves and provide your team the opportunity to discuss and overcome the negatives. Most importantly, regular reinforcement is the simplest way to ensure PPE is worn at all times. You may feel like a broken record, but at the end of the day it will mean less pain, less lost time and might even protect an employee from a more serious injury at work.

## BACK & MUSCLE STRAINS

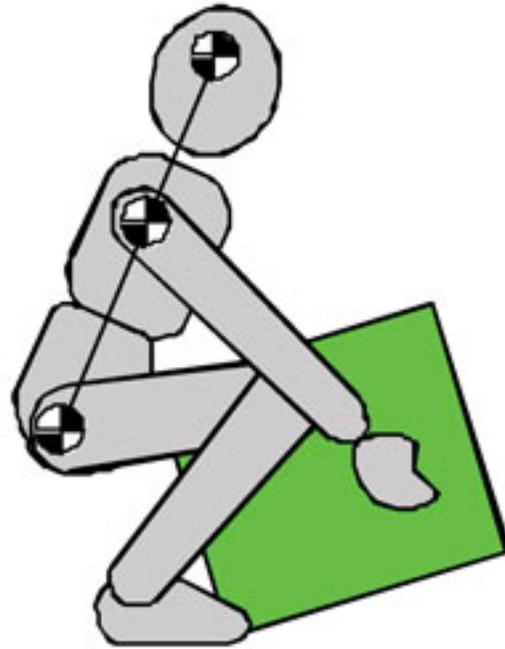
Holding steady at second on the list of persistent safety concerns for OMP respondents was back and muscle strains, with 23 percent. These injuries are very common and affect most everyone at some point in their life. Fatigued muscles, sudden movements or improper lifting techniques can strain or sprain the muscles and ligaments of the body. Back injuries can be debilitating if the injury sustained is serious. Most of the stress associated with bending, twisting and lifting heavy objects is concentrated at the bottom of the spinal column, and this part of the back is particularly susceptible to injury.

A strain of any kind usually occurs when the muscles are asked to stretch too far, lift too much weight, or move in such a way that causes very small tears. There is usually a microscopic amount of bleeding into the muscle, which results in swelling and painful muscle spasms. Injured muscles are often even tender to the touch. And although it's certainly no picnic, the pain associated with sprains is the body's way of telling you that a muscle has been injured and needs to be protected from further use.

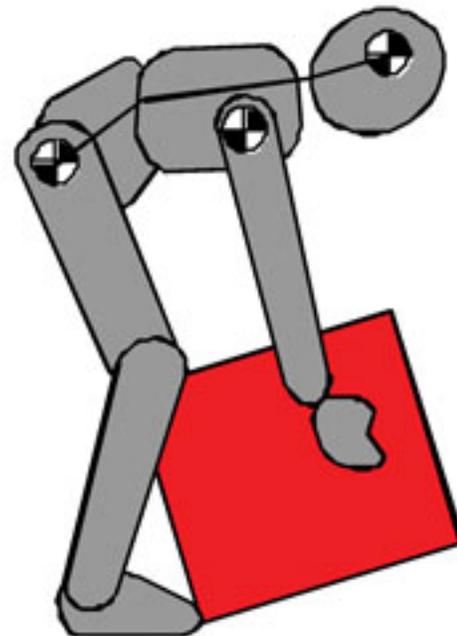
Though treatable—rest, hot/cold packs, gentle massage and anti-inflammatory pain relievers will take care of most common injuries—muscle strains may mean lower production levels, time away from work, or, depending on the severity, temporary disability. Rather than treating the injuries, the goal should be to prevent them. Much like PPE, it can be difficult to get employees to cooperate with suggestions and policies, but reinforcement is the key.

There are a variety of causes for strains and sprains which include, but are not limited to:

- Improper lifting techniques
- Tired muscles due to repetitive or prolonged activities
- Forceful exertions



CORRECT LIFT



INCORRECT LIFT

- Working conditions that are too hot or cold
- Excessive vibration
- Awkward twisting, bending or leaning

And, it should come as no surprise that the costs associated with this type of injury can be excessive. However, the benefits of minimizing the hazards that cause these injuries are invaluable.

Generally, prevention is inexpensive and easy to implement. Begin by analyzing the various jobs in your plant and highlight the potentially dangerous tasks. Here are some tips for prevention:

- Ensure your employees have the proper equipment that they need to accomplish a project.
- Schedule proper lifting presentations that include demonstrations.
- Give employees a variety of tasks so that they are not continually carrying out repetitive motions.
- Provide short breaks at regular intervals.
- Implement a stretching program at the beginning of the work day or before each shift.
- Offer a fitness program after work.
- Place warning posters in key locations to remind workers of the dangers of sprains and strains.

## UNSAFE BEHAVIOR

Sliding into third place is a common problem that is probably at the root of most accidents and injuries at the workplace. Always in a hurry to get a project finished and out the door, employees often forget important safety rules and regulations or simply choose to ignore them. And, although it's one of the most important pieces, building a safety awareness culture is sometimes a difficult task.

Here is the problem: if the employees don't think that the management team takes safety seriously, they won't either. That makes the solution more simple than originally thought! Every business has a core set of business processes, from quality control to marketing. To be most effective, safety and health must be balanced with and incorporated into your core business processes. As much emphasis should be given to safety and health issues as is given to other management issues. Everyone that works in, contracts with, or stops for a visit at your facility should understand how important safety is to each individual at your company from the CEO to the summer help. The sum is only as good as its parts!

All appropriate warning posters and information should be current and posted, and when necessary be available in English and Spanish. (More than 75 percent of OMP respondents have one or more Spanish-speaking employees working at their company. See this month's Safety Scene on page 22 for more information.) A Safety Committee whose members represent a good cross-section of the company can help develop, implement and monitor safety and health issues, and it never hurts to offer safety incentives. Incentives encourage employees in many ways. Sometimes they promote a little friendly competition and they often promote teamwork, but no matter what, you can definitely count on higher employee morale, even if the reward is as simple as a pizza day for the group with the longest standing injury-free record.

If you're looking for some concrete rules to post around the facility, these are a good start:

- Never operate machinery unless you have been properly trained.
- Report any safety or health concerns to a supervisor immediately.
- Be aware of your environment.
- Concentrate on your responsibilities.
- Come to work neat and clean with long hair tied back, avoid loose clothing that could get caught in a machine.
- Follow all of the safety guidelines provided to you by your management!

## **NAIL GUN & HAND TOOL MISHAPS**

Eleven percent of OMP respondents listed nail gun or other hand tool mishaps as their number one safety issue making it the fourth most commonly given response. Tools, in general, are such an ordinary part of our lives that it is difficult to remember they may pose hazards. Unfortunately, a serious incident can occur before steps are taken to identify and avoid or eliminate tool-related hazards.

Non-power hand tools, such as hammers, present their own set of risks and because they are not electrically or pneumatically powered, their destructive power is often underestimated. Each tool is intended for a specific job, and it's important to remind your employees to use the proper tool for each job. In addition, employees should be taught how to take proper care of their tools as damaged tools can be dangerous.

Power tools fall into several categories, determined by their power source: electric, pneumatic, liquid fuel, hydraulic and powder-actuated. Power tools should be fitted with guards and safety switches as they are extremely hazardous when used improperly. Power tool safety rules fall into the common sense category, but it's never a bad idea to remind your employees regularly.

The following checklist can be the focus at your next safety meeting. It won't take long to present these safety tips and you can answer any questions the crew might have:

## **PLATE CUTS & BACK STRAIN & MISHAPS, OH MY!**

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil and sharp edges.
- Disconnect tools when not using them, before servicing and cleaning them and when changing accessories.
- Keep all people who are not involved with the work at a safe distance from the work area.
- Secure work with a clamp or vise, freeing both hands to operate the tool.
- Avoid accidental starting. DO NOT hold your fingers on the switch button while carrying a connected tool.
- Follow instructions in the user's manual for lubricating and changing accessories.
- Be sure to keep good footing and maintain good balance when operating power tools.
- Remove all damaged portable electric tools from use and tag them: "Do Not Use."

- Inspect all cords/hoses on tools.

Specifically, pneumatic tools are powered by compressed air. There are several dangers associated with the use of pneumatic tools, the first of which is getting hit by one of the tool's attachments or by some kind of fastener the worker is using with the tool, such as a nail.

Pneumatic tools should be checked to be sure all tools are fastened securely to the air hose. Two safety devices must be used when using pneumatic tools. They are:

- Short wire or positive locking device should be used when attaching the air hose to the tool.
- A safety excess flow valve must be installed to reduce pressure in case of hose failure.

Pneumatic tools that shoot nails or similar fasteners operate using air pressures of more than 100 pounds per square inch. Altering or removing the nail gun safety spring to increase the firing rate of a pneumatic gun will eventually end up as a jammed gun, or worse yet, an accident. A nail gun that is missing its nose guard safety spring should never be used. Train your employees to disconnect the nail gun from its air source before carrying it out of the work area. And, hey, everyone likes to have fun at work, but it is NEVER okay to point a nail gun at ANYONE. Horseplay is not an option.

## **AND THEN THERE WAS ONE...**

The remaining respondents listed several other safety issues, each of which you have probably encountered at your company. They ranged from property damage to machine guarding concerns. There are a lot of issues that can arise when people, machinery and manufacturing mingle. It's easy enough to single out one safety problem and find a relatively simple solution, but let's be realistic, is that the best approach? Of course not.

If your company wants to reduce accidents, injuries, illnesses and their related costs, everyone must place an emphasis on safety, every day. The best way to accomplish all of your safety goals is by implementing a comprehensive safety program in your component manufacturing facility. WTCA has made that implementation process easier than ever before.

In September of 2004, WTCA released its Operation Safety program. Operation Safety lays the foundation on which your comprehensive safety program can be constructed. This industry-specific program was developed utilizing the guidance of component manufacturers, risk management specialists, safety professionals, insurance brokers and government safety agencies.

## **IT'S NOT JUST A GOOD IDEA, IT'S THE LAW**

The Occupational Safety and Health Administration (OSHA) requires employers to provide a workplace that is free from recognized hazards and to comply with occupational safety and health standards. In addition, OSHA considers training to be an essential part of every employer's safety and health program. Our goal is to help you turn OSHA into just another acronym, instead of one of your favorite four-letter words. WTCA's Operation Safety program has the information to help you combat the safety issues explored above and so much more! Visit

[www.wtcatko.com](http://www.wtcatko.com) for more information.

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