

# Transition Toolbox Meeting - Week 1 Day 2, Safety Glasses and the Eye

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A great many people are avid sports fans who enjoy watching favorite players in action: a goalie on a hockey team, a baseball catcher, maybe a pro football linebacker, a prizefighter, or possibly a racecar driver. No matter what the sport or type of action, they enjoy watching these people, some of them the best in the business.

Many sports have a variety of hazards, and in order to cope with the hazards, the participants all have something in common – they all use protective equipment. The consequences if they didn't use equipment are obvious.

But the number of injuries that occurred before this protective equipment became common is unknown. The unfortunate point of the matter is that accidents were required before the protection was seen as necessary. Hindsight is always 20-20.

Most of us recognize that the use of hand tools, power tools, and soldering irons requires safety glasses. This is true whether we are working on communications equipment or a do-it-yourself project at home. In other cases our environment necessitates the use of protective equipment and an entire area will be designated as requiring protective equipment.



If safety glasses are mentioned to you, do you think of a nuisance item or are you like the professional athlete who understands the value of being able to avoid an injury?

Sometimes a degree of comfort has to be traded off for personal protection. No one has ever said that safety glasses and other protective equipment are comfortable or convenient. A boxer would have a terrible time trying to talk or eat with his mouth guard in, but “on-the-job” he can't do without it.

Of course you can't or don't want to wear protective equipment around the clock, but if not worn in the situation for which the equipment is intended, you not only cheat yourself but your family as well. Should the unexpected occur, protective equipment could well be the “second chance.”

Just as a ballplayer who feels safe and secure is a better player, a worker who feels safe and secure is a better worker and a better family provider.

Eyes provide 83% of your knowledge, control 80% of your actions and direct over 50% of your energy. Remember, anything that affects the eyes may affect the body and vice versa. Take care of both. *EH&S Manual Chapter 6620 Personal Protective Equipment and its technical appendices are a source of requirements and sound recommendations on the selection and use of PPE.*



## Transition Toolbox Meeting - Week 1 Day 3, Back Problems

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Year after year, back injuries continue to be a problem that plagues many employees. Approximately 40% of all injuries were related to backs. Back pain, especially low back pain, is second only to head colds and other respiratory problems as the leading cause of time off the job. It is estimated that 7 million persons in the United States are being treated for chronic backache.

You can live with a minor backache – but it's not fun. Of all human ailments, back disorders are about the most uncomfortable and the hardest to get rid of. Heat treatments, medication, corsets, and hard bed boards will help, but it's very easy to re-injure a sore back while it's healing.

Although there are many causes of back trouble and related health problems, there is one major cause – lifting.

It doesn't matter whether you lift a box of telephone equipment or a bag of groceries, when you use poor lifting techniques you're asking for trouble. Be smart, protect yourself and pay attention to what you are doing.

The lifting of a great deal of weight is not required to cause painful back damage. The laws of gravity and leverage work against the poor lifter. The situation is made worse by the strain of his own muscles, which are always working to hold the back upright. The stress imposed on the back by improper lifting amounts to many times the weight of the object being lifted.

By this time you're probably thinking – here we go again or how many times are we going to be told how to lift something. Well the answer is at least one more time. The number and severity of back injuries makes it absolutely necessary.

1. First of all, size up the load. Are you certain you can handle job alone? If not, get help.
2. Next, be sure that your path is clear. Remove all obstacles before picking up the load.
3. Know exactly what you're going to do with it and prepare a place to set it down.
4. Squat near the load with your toes pointing slightly outward and your feet set at about shoulder width. Keep your back upright.
5. Grasp the load firmly by diagonally opposite corners with one had to pull toward you and one hand to lift.
6. Hold the load close to your body and lift with your legs.
7. If you must, turn by moving your feet, not by twisting your body.
8. Squat down again to set the load down.

Don't be careless for a minute and have a lingering back problem. Pay attention to what you're doing and lift the right way. *EH&S Manual Chapter 6105, Office Safety, page 6 has tips on good lifting technique.*

## Transition Toolbox Meeting - Week 1 Day 4, Electrical Hazards

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Recently, in one year alone, electric current killed 1030 persons. Faulty electric wiring and appliances were the cause of 113,500 fires in a single year, at a total cost of \$162 million. Also, the records do show that there has been a fatality on a circuit with a voltage as low as 46 volts. If you accept this as a fact, then we should consider any circuit that carries 46 or more volts as dangerous.

There are a few things about electricity that we ought to know so we can guard ourselves against electric shock when handling such things as drills, saws, buffers, sanders, extension cords, and drop lights. Just remember it isn't the amount of electricity in a circuit that makes the difference between life and death if you come in contact with a live source of power. What really makes the difference is the amount of current that runs through the vital parts of your body.

Workers are killed by 115-volt circuits each year. Authorities state that any shock from over 15 milliamperes of current can kill a person. Here is what that means – at 115 volts, a 100-watt light bulb pulls 900 milliamperes of current, a 10-watt light bulb pulls 90 milliamperes of current, and a 5-watt light bulb pulls 50 milliamperes of current. Therefore, the amount of current used by a 5- or 10-watt light bulb pulls more than sufficient current to kill a human being.

Remember that the condition of your body has a lot to do with your chances of getting a fatal shock. If your hands are sweaty, or if your socks and shoes are moist or damp, or if the flooring is wet, or if you are standing in a puddle of water, this moisture will let more current pass through your body. Observe extreme caution when we are working with portable electric power tools in wet or damp places –near piping or other grounded objects that we might touch and thereby give electricity a path through our bodies to the ground. *Use GFCI protection in wet or damp places.* GFCI devices are located in your Extension Cord Safety Cabinet.

The ground wire on tools is built into the tool's power line (cord). The same applies to extension cords. Make sure that the ground connection is made when plugging into any receptacle. You can be sure that the circuit has a built-in grounding system and that you will be protected when you plug in. If the plug doesn't have three prongs or if the receptacle lacks three openings, contact your supervisor or safety professional for guidance before using any tool without a three-prong plug. Extension cords are available at Extension Cord Safety Cabinets and remember, tools and extension cords can be tested there as well. Frayed or broken cords should be cut up and disposed of.

If you ever get a shock from any equipment that you are using, report to your supervisor and medical services. Let's leave electrical repairs to the electricians and make certain that we use grounded equipment to avoid electrical hazards. *EH&S Manual Chapter 6210 – General Electrical Safety provides important information and links to technical information.*

## Transition Toolbox Meeting - Week 1 Day 5, Housekeeping

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Housekeeping is probably the most important phase of accident prevention. Locations and departments that are disorderly usually have poor accident records. Clean, neat, and orderly facilities greatly improve chances of having a good accident record!

As an example, employees are much more likely to slip or fall on greasy, oily, or cluttered floors than on clean ones. Workers can trip over loose objects on floors, stairs, and platforms, loose objects falling from overhead can hit them, and they are apt to bump against or run into large objects left out of place. Loose tools lying around on the floor and even an unloaded skid or pallet piled where it shouldn't be can cause a trip and fall. You know the items as well as I do. They all can be hazards.

Good housekeeping means more than an occasional grabbing of a broom to hurriedly spruce up a spot. You have to work steadily to avoid having a dirty, cluttered, or messy workspace, workbench, or shop. Keeping your area clean must be part of your everyday work. If everybody does this part of his job, the whole location will reflect it.

Good facility housekeeping includes the proper storage of materials, supplies, and small parts...the orderly arrangement of tools and equipment...and regular cleanup and removal of scrap or debris in the department. It also includes the proper storage of chemicals and hazardous materials, the proper storage of lifting devices, and the availability of PPE most often needed for routine tasks.

We should also make sure that stairways and platforms are kept clear. Particular attention should be paid to keeping the aisles and work passageways clear. A well-maintained and clear aisle usually means that the overall housekeeping is good. So let's keep from crowding stored or stacked materials out over the aisle lines.

If we keep the location clean, we have lessened the chances of having accidents. We will have done away with the things that have been the cause of slipping, tripping, and falling accidents – and there will be less likelihood of people being involved in the “struck by”, “striking against”, and “caught-between” type of accidents.

If for some reason your work area has to be in disarray due to the nature of work, make people aware of the danger by posting appropriate signs – men working overhead, slippery floor, etc. Let's start today with a renewed good housekeeping campaign. Each of us can help. Pick an area or a process today and focus on it. Let's keep our location clean.

*The EH&S Manual has specific recommendations regarding housekeeping. For example, see Appendix 6610-T3 General Safety Guidelines for Working with Chemicals, and Chapter 6682 Beryllium Handling and Exposure.*

