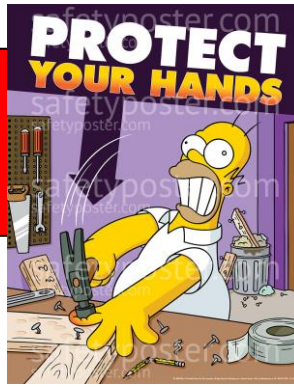


TOOLBOX TALK NO.38

Hand Tools



One of the key issues associated with hand tool safety is choosing and using the right tool. Unfortunately, many people use tools improperly, where they improvise with what they have on hand. Also, many people view hand tools as simple to use, so there is little concern for safety. In reality, a person using hand tools, no matter what they are, should always follow safety precautions.

Approximately 8 percent of industrial incidents result from the improper use of hand tools, according to studies. Injuries range from simple cuts, contusions and abrasions to amputations, fractures and punctures.

Hammers, wrenches, chisels, pliers, screwdrivers, and other hand tools are often underrated as sources of potential danger. Hand tools may look harmless, but they are the cause of many injuries.

Protecting your fingers and hands is important for your work and quality of life. Work-related hand injuries are one of the leading reasons workers end up in the emergency room and miss work. Damage to the nerves in your fingers and hands, loss of a finger, a skin burn or allergic reaction, can negatively impact the quality of your work, your productivity – or worse – end your career and seriously detract from your quality of life.

Hand tools can cause many types of injuries:

1. Cuts, abrasions, amputations, and punctures. If hand tools are designed to cut or move metal and wood, remember what a single slip can do to fragile human flesh.
2. Repetitive motion injuries. Using the same tool in the same way all day long, day after day, can stress human muscles and ligaments. Carpal tunnel syndrome (inflammation of the nerve sheath in the wrist) and injuries to muscles, joints and ligaments are increasingly common if the wrong tool is used, or the right tool is used improperly. Injury from continuous vibration can also cause numbness or poor circulation in hands and arms.
3. Eye injuries. Flying chips of wood or metal are a common hazard, often causing needless and permanent blindness.
4. Broken bones and bruises. Tools can slip, fall from heights, or even be thrown by careless employees, causing severe injuries. A hammer that falls from a ladder is a lethal weapon.

To avoid such injuries, remember the following safety procedures:

1. Use the right tool for the job. Don't use your wrench as a hammer. Don't use a screwdriver as a chisel, etc. Get the right tool in the right size for the job.
2. Don't use broken or damaged tools, dull cutting tools, or screwdrivers with worn tips.
3. Cut in a direction away from your body.
4. Make sure your grip and footing are secure when using large tools.
5. Carry tools securely in a tool belt or box. Don't carry tools up ladders. Use a hoist or rope.
6. Keep close track of tools when working at heights. A falling tool can kill a co-worker.
7. Pass a tool to another person by the handle; never toss it to them.
8. Use the right personal protective equipment (PPE) for the job.
9. Never carry sharp or pointed tools such as a screwdriver in your pocket.
10. Select ergonomic tools for your work task when movements are repetitive and forceful.

11. Be on the lookout for signs of repetitive stress. Early detection might prevent a serious injury.
12. Always keep your tools in top condition. A dull blade or blunt point can lead to injury.
13. Store tools properly when you stop work.

Below are examples of improper use of hand tools. Have you done any of these?

- Pushing rather than pulling a wrench to loosen a tight fastener.
- Bending metal with undersized pliers, which can damage the pliers and the metal.
- Holding an item you are working on in one hand while attempting to remove a screw with a screwdriver in the other hand.
- Cutting toward your body with a cutting tool
- Using dull cutting tools.
- Filing materials not properly secured in a vise with no handle on the file.
- Using a tool not sized properly for the job (e.g., sockets that are slightly larger than the fastener).
- Not only do you need to utilize the tool properly, but it needs to be in good shape. Take a moment before using any hand tool to ensure that it is in good shape. Things to look for include:
 - A hammer with a chipped head and/or with a loose or broken handle;
 - A screwdriver with a worn or broken tip;
 - Any cutting tool with a dull surface;
 - Chisels with a mushroomed head;
 - Tools that have had their temper removed

Remember: The potential to cause harm can be substantially reduced if a system of regular checks, inspection and maintenance is put into practice.

Hand tools can be as dangerous as power tools. Make sure you use them correctly.