



## Hand Tool Safety

The correct use of tools is the distinguishing mark of a craftsman. The amateur makes seven simple jobs hazardous by not using the correct tools—or by using the right tool incorrectly. Attempting to make a screwdriver do a job that calls for a chisel—or vice versa—is bad enough, but when the substitution doesn't work out, the frustrated amateur may take it out on the tool and hurl it aside. This can destroy its usefulness for the job it was designed for.

The tool may also become unsafe to use. In fact, it is estimated that hand tool mishaps are responsible for about one out of twelve compensable workplace injuries—including cuts and bruises, punctures, fractures, even loss of a finger, hand, or eye.

### What Could Go Wrong?

Some of the most obvious misuses of tools at home or on the job result from being in a hurry. Instead of getting the right tool, someone will grab a file and use it to pry open a box, or will use anything close at hand—including a hand—when a hammer should be used. This is just asking for trouble.

In one plant, for example, a machinist broke her hand when attempting to adjust a press with pliers—not surprisingly, they slipped. The job called for a wrench, but the pliers were probably closer at hand. So this typical misuse of a tool resulted in a costly, painful, and needless injury.

But even selecting the right kind of tool isn't enough. It's also important to inspect the particular tool before using it.

#### Note:

Here's a good place to get workers to come up with examples of how tools can become damaged in a way that makes them inefficient and/or unsafe. Following are some examples you'll probably want to mention if they don't.

- Wrenches may become incapable of providing a safe grip after prolonged heavy use, which often causes the jaws to spread.
- Drills, augers, and bits may be incorrectly tempered or dull and otherwise worn.
- Knives, chisels, drills, and similar tools may have lost the sharpness of their cutting edges. Sharpness is important to their safe use.
- Files may have missing or broken handles and tangs that are bent, broken, or chipped.
- Chisels and punches need to be checked for mushroomed or chipped heads and bent or broken points.
- Hammers are frequent victims of abuse. The heads become deformed or the handles cracked. When one man struck an object with a hammer, part of the handle broke off and hit him in the eye. His eyesight was saved, but a painful injury could have been prevented had he inspected—and rejected—that hammer (and worn the safety glasses provided).
- Power tool defects shouldn't be overlooked either. Be on the lookout for such things as broken insulation, loose connections, sparking brushes, and defects in the plugs and switches. There should, of course, be third-wire grounding or double insulation.

All of the defects previously mentioned, and any others you may discover, are cause for taking the tool out of service at once. **Never use a faulty tool!** Call it to the attention of your supervisor.



### Other Precautions

In addition to watching out for defective tools, correct usage and storage are important factors in preventing injuries. For example, tools should always be returned to their proper places when they aren't in use. Tools left on the floor can cause a serious fall, and tools left on ledges or scaffolds may fall on someone. Sharp tools should be stored so that their cutting edges aren't exposed.

Proper transportation of tools is another consideration. They should be carried in a toolbox or cart or in a belt designed for that purpose. Sharp or pointed tools should obviously not be carried in a pocket.

It should go without saying, but unfortunately doesn't, that if a tool has to be exchanged with another worker it should never be thrown. It should be passed from one person's hand to the other's, with the handle toward the receiver. Or, if it has to go from one level to another, a bucket or bag that will safely handle the tools should be secured to a rope for lifting or lowering.

Another part of safe tool usage is using appropriate personal protective gear. This could mean safety glasses with hammers, files, and cold chisels; gloves with tin snips and other cutting instruments; safety hats and shoes when tools are used overhead or pieces of the work are likely to fall.

In this short time, we haven't been able to cover every tool specifically. But many of the safety principles mentioned apply to a wide variety of tools. To sum up: choose the right tool, make sure it's in safe condition, then use and store it safely.