



Safe Use of Hand Tools

The incorrect use of hand tools is big cause of injuries at home and in the community. Here are some general tips to reduce physical strain and improve overall tool safety.



1. Keep wrists straight.

You want to avoid bending or rotating the wrists. Bending the wrists decreases overall grip strength, and places great pressure on the finer, smaller muscles that control hand function.

2. Avoid stress on soft tissue.

When stress or direct pressure is applied to the soft tissues of the body, blood circulation is stopped or reduced in some way. Pressure compresses muscles and tendons. Stress also decreases the muscles ability to get the job done.

To avoid stress on soft tissue, avoid grips on tools that have sharp edges or cause the skin to be pinched or blanch (blanch turns skin white reducing vital blood circulation in the affected areas). Use slightly compressible non slip gripping surfaces; rather than hard plastic.

3. Distribute your grip over as large an area as possible.

Select tools that use a full-hand power grip, rather than a more precise finger grip. This enables the hand to use larger muscles that have greater capability of doing the work, without injury. Tools that can use all four fingers versus only one finger are a better choice as this reduces stress on the smaller joints of the hand.

4. Wear protective equipment that fits.

Always wear protective equipment that fits. For instance, tight fitting gloves put pressure on the hands; loose fitting gloves reduce grip strength and pose other safety hazards like snagging or slipping. Wearing protection is important to prevent the potential for damage. Don't forget to wear safety glasses when working with tools.

5. General Safety Precautions

- Keep all tools in good condition with regular maintenance
- Use the right tool for the job
- Examine each tool for damage before use
- Operate tools according to manufacturer's instructions

6. Do not raise or extend elbows when working with heavy tools.

Work in the comfort zone. This keeps the muscles working in their strongest, most comfortable position.

*Excerpts from this article have been taken from
["No Pain is Your Gain Workshop"](#), 2002.*