

HAZARD ALERT

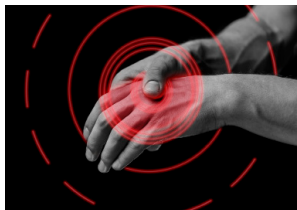
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THE CENTER FOR CONSTRUCTION
RESEARCH AND TRAINING

HAND TOOLS



What's the Problem?

Using the wrong hand tool, or the right tool the wrong way, can injure the muscles, tendons, or nerves in your hand, wrist, or arm. These types of injuries develop, and can worsen, over time.



Early symptoms may include achy, tired hands and wrists that feel better after rest. It is easy to just write these off to a hard day's work – and in some cases that's true.

But if these symptoms become more frequent, or cause you to stop working to rest your hand a lot, you may already be injured.

Types of Injuries...

If a hand tool vibrates, causes you to hold your hand or wrist in an awkward position, or requires a lot of grip strength, you can end up with an injury that might even force you to quit construction work. Types of injuries include:

- ▶ **Tendonitis:** difficulty straightening fingers;
- ▶ **Carpal Tunnel Syndrome:** pain, tingling, and numbness in the wrist and hand;



Hand Arm Vibration Syndrome

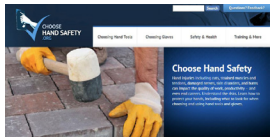
PHOTO COURTESY OF NIOSH

- ▶ **Hand Arm Vibration Syndrome (white finger):**

numbness in hands and fingers, a loss of touch and grip, and pain.

Find out more about choosing safer hand tools and protecting your hands:

- ▶ **ChooseHandSafety.org:** A one-stop source for information on selecting and using hand tools
- ▶ **OSHA Safety and Health Topics:** Hand and Power Tools – www.osha.gov/hand-power-tools
- ▶ **NIOSH Easy Ergonomics:** A Guide to Selecting Non-Powered Hand Tools – www.cdc.gov/niosh/docs/2004-164/pdfs/2004-164.pdf
- ▶ **CPWR Construction Solutions:** www.cpwrcolutionsolutions.org/search.php?q=tools



A hand tool is only ergonomic if it fits YOUR hand AND is right for the work YOU are performing.

Protect Your Hands!

1 Choose a tool that...

- ▶ Is designed for the job.
- ▶ Fits your hand size and is comfortable to hold.
- ▶ Keeps your wrist straight.
- ▶ Has a handle that extends beyond your palm – no sharp edges
- ▶ Requires the least amount of force to use.
- ▶ Provides balance – doesn't tip forward or back when held.
- ▶ Does not exceed the minimum weight required to do the job.



2 Use the tool safely...

- ▶ Keep your wrist as straight as possible.
- ▶ If the grip is too small, the right gloves may help or add a cushion.
- ▶ If the grip is too big, adjust or change the handle, or select a smaller sized tool.
- ▶ Gloves and anti-vibration wraps will improve grip strength and reduce vibration.
- ▶ Use caps or guards on striking tools to avoid overstrike injuries.
- ▶ Select two-handed tools with handles that extend beyond your palm, and have a spring return and locking position.

3 Remember...

- ▶ Focus on keeping your hands safe – not just at the start of a job.
- ▶ Try to rest your hands during the day.
- ▶ Keep your tools sharp and in good condition.
- ▶ Consider doing exercises to strengthen key muscles.
- ▶ Don't raise or extend your elbow when holding a heavy tool.
- ▶ Use a power tool when it's safe and feasible. For example, switch to a power drill or a nail gun instead of relying on a screwdriver and hammer.

Using the RIGHT HAND TOOL the RIGHT WAY

can reduce fatigue and increase productivity, improve the quality of your work, and reduce the risk for hand, wrist, and arm injuries.

Find out more about construction hazards.

To receive copies of this Hazard Alert and cards on other topics, call

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