

news & notes

HANDS-ON SAFETY

According to the Occupational Safety and Health Administration (OSHA), the greatest hazards posed by hand tools are from misuse and improper maintenance. Consider these common hazards:

- If a chisel is used as a screwdriver, the tip of the chisel may break and fly off, hitting the worker or others.
- If a wooden handle on a tool like a hammer or an axe is loose, splintered, or cracked, the head of the tool can fly off and strike the user or somebody nearby.
- If the jaws of a wrench are sprung, the wrench can slip.
- If impact tools like chisels or wedges have mushroomed heads, the heads can shatter on impact, sending shards flying.

Employers are responsible for the safe condition of tools and equipment, according to the regulations. And they must train employees in the proper use and handling of tools and equipment.



"So, does anybody have any questions? Yes, Edward?"



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Get a handle on hand tools

Know how to use them safely

Hand tools—from axes to wrenches—are powered manually. But just because they don't have a power cord, that doesn't mean you can't get hurt.

A few general rules of thumb will help ensure that no fingers or other body parts are injured while using hand tools.

- When using blades, knives, or other tools, always direct the tools away from aisles and away from other employees working nearby.
- Keep knives and scissors sharp, because dull knives can cause more hazards than sharp ones.
- Cracked saw blades must be removed from use.
- Don't use wrenches if the jaws are sprung to the point that slippage occurs.
- Be vigilant to the presence of sparks when using iron or steel hand tools, which can be a source of ignition around flammable substances. Instead, use spark-resistant tools where flammables are used or stored.

Also, be aware that it's all about using the right tool for the job. According to the National Institute for Occupational Safety and Health (NIOSH), nonpowered hand tool use can contribute to musculoskeletal disorders. The solution is to choose the right tool for the job. Know how to identify the tools that will accomplish the specific purpose at hand.

Always be aware of the dangers of using hand tools in awkward postures, which can create unnecessary demands on the body. The best hand tool is one that requires the least continual force. This can reduce pain and fatigue by keeping the neck, shoulders, and back relaxed.

Reduce risk by using hand tools that:

- Do not have sharp edges or finger grooves on the handle,
- Are coated with soft material,
- Have an angle that allows work to be done with a straight wrist,
- Can be used with either hand, *and*
- Have a nonslip surface for better grip.

Speak up when you feel discomfort while using a hand tool (or any tool, for that matter). Advise your supervisor or member of the safety staff if you experience these symptoms:

- Tingling;
- Swelling in the joints;
- Decreased mobility;
- Decreased grip strength; *or*
- Pain related to movement, pressure, or exposure to cold or vibration.

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COUNTERTOP CONTROLS

The Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) recently issued a joint hazard alert about protecting workers from significant crystalline silica exposure during the manufacturing, finishing, and installation of natural and manufactured stone counter-tops.

The hazard alert follows reports of 46 workers in Spain and 25 workers in Israel who developed silicosis—an incurable, progressively disabling, and sometimes fatal lung disease—as a result of exposure to crystalline silica in their work manufacturing stone countertops. Ten of the workers in Israel re- quired lung transplants as a result of their condition.

OSHA and NIOSH have identified exposure to silica as a health hazard to workers involved in stone countertop operations in the United States, both in fabrication shops and during in-home finishing/installation. The alert jointly issued by OSHA and NIOSH explains how this hazard can be mitigated with simple and effective dust controls.



Hand tool safety quiz

Test what you know

Choose the correct answer for the following statements.

1. The greatest hazards of hand tools result from misuse and improper maintenance. **True or False**
2. It's OK to use a damaged tool until you can get a new one. **True or False**
3. An example of properly matching the tool to the job is:
 - a. Using the right size flat head screwdriver on a flat head screw
 - b. Using a screwdriver as a chisel
 - c. Using tools that could spark near flammable materials
 - d. All of these
4. Which of the following can result from improper use of tools?
 - a. Struck by flying debris
 - b. Abrasions and contusions
 - c. Musculoskeletal disorders
 - d. All of these
5. It's important to consider the size, shape, and grip of the tool for the job. **True or False**

ANSWERS

1. True. 2. False. Tag damaged tools "Do not use" and report to your supervisor.
3. a. Using the right size flat head screwdriver on a flat head screw.
4. d. All of these 5. True.

Spring home improvement

What you need to know about safe installation

Many homeowners may be upgrading their kitchens this spring, so be aware of the dangers of installing stone countertops. Crystalline silica is found in granite, sandstone, quartzite, various other rocks, and sand.

Workers who inhale very small crystalline silica particles are at risk for silicosis. Symptoms of silicosis include shortness of breath, cough, and fatigue, and may or may not be obviously attributable to silica.

Workers exposed to airborne crystalline silica are at increased risk for lung cancer, chronic obstructive pulmonary disease, and kidney disease.

Here are some engineering and work practice controls to reduce silica exposure:

- Use water spraying systems and remote-controlled tools at the impact site where a saw or grinder generates dust.
- Use hand tools (e.g., drills, masonry saws, grinders) equipped with a shroud and a vacuum with a high efficiency particulate air (HEPA) filter when methods are not practical.
- Use wet sweeping or HEPA-filtered vacuuming instead of dry sweeping or compressed air.
- Prewash stone slabs before cutting.
- Implement regular and thorough housekeeping procedures for water slurry and settled dust.