

# Hand & Power Tool Safety

Hand and power tools are commonly used in various industries and occupations, but they can pose serious risks if not used properly. Accidents and injuries caused by these tools can be avoided by following safe operating procedures and being aware of common risk factors. Review this fact sheet for safety precautions to follow when using hand and power tools.

## Hand and Power Tool Safety Tips

- Know your tools and choose the appropriate tool type and size for the job.
- Maintain tools so they are clean, sharp, and in good working condition.
- Use the tool only for its intended purpose.
- Inspect tools before using them. Examine the cord, guards, housing, alignment, and overall condition.
- Remove damaged tools from service and immediately notify your manager/supervisor.
- Do not remove or circumvent any guards or other safety mechanisms.
- Never transport tools by the cord or hose.
- Do not attempt to catch falling tools.
- When not in use, disconnect tools from the power source before servicing or changing blades, bits, and cutters. To disconnect, pull the plug — do not yank the cord or hose.
- Before using tools, make sure they are grounded (3-wire plug is intact); use a ground-fault circuit interrupter (GFCI) outlet if one is available.
- Be cautious of sparks generated by tools. Stay away from flammable vapors, dusts, or combustible materials.
- Avoid using electric tools in wet or damp conditions.
- Use clamps or a vise to secure the workpiece to keep hands free and maintain control. Always use tools only on stable surfaces.
- Do not apply excessive force; let the tool do the work.
- For unfamiliar tools, review the manufacturer's instructions and obtain proper training before use.
- Do not operate power tools if you are fatigued, distracted, or taking medication that may impair alertness.



## Housekeeping Tips

- Keep floors clean and dry to prevent slips and falls when working with power tools.
- Create organized areas with designated areas for tools or store them in cabinets.
- Never leave tools on ladders or in walkways where they could fall or cause a tripping hazard.
- Return tools to their proper place after use.
- Make sure you have enough room to work safely.

## Always Use PPE

- Wear safety glasses or goggles to protect your eyes from dust and flying debris. Use a welding hood to protect against hot metal fragments when grinding or soldering.
- Wear gloves to protect your hands from scrapes and bruises. Use the appropriate gloves for each tool and task, if necessary.
- Wear steel-toe or composite-toe shoes to keep your feet safe from falling tools and materials, if necessary.
- Use hearing protection when noise levels exceed safe limits
- In certain situations, respiratory protection may be needed to guard against dust and fumes
- Avoid wearing loose clothes and keep long hair tied back.

## References

- OSHA: [Hand and Power Tools](#)
- Yale EHS: [Hand and Power Tools](#)
- UCLA EHS: [Hand and Power Tool Safety](#)