



# Portable Power Tool Safety

# [ Goals ]

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- This safety session should teach employees to:
  - Understand the hazards of portable power tools.
  - Know how to work safely with portable power tools.

# Ignoring Safety with Portable Power Tools Can Cause Injuries

- Injuries may include:
  - Contact with points of operation, such as saw blades
  - Electrical shock, fire, or electrocution
  - Eye injuries from flying chips, dust, or shavings
  - Dropping a tool on a body part or straining too hard to lift a heavy tool

# Tool Design Provides Some Protections

- Leave all guards in place. Safety standards require guards for tools like circular saws and belt sanders.
- Use instant-off switches that keep the tool running only when you're using it. Take your finger off the switch when you carry a plugged-in tool.

# [ Use the Right Tool for the Job ]

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- Match the tool and its capacity to the work task.
- Check the manufacturer's manual for tool functions and limitations.

# Use Only Tools That Are in Good Working Order

- Inspect tools before use to make sure they're in working order, with no missing parts.
- Keep tools sharp, clean, and in good condition.

# [ Practice Electrical Safety ]

- Check that tool cords have good insulation; if not, don't use the tool.
- Protect the cords.
  - Keep cords away from sharp edges, heat, or anything that could cause damage.
  - Don't carry the tool by its cord or yank the cord from an outlet.
- Match plugs and outlets.
- Keep tools away from flammable liquids or waste; use non-sparking tools when necessary.
- Don't handle tools with wet hands or use tools in wet areas; water can make you an electrical conductor.
- Turn off the tool and the power source before adjusting or fixing the tool.

# Use Personal Protective Equipment

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- Wear safety goggles; and, if you're creating a lot of dust, wear a respirator suitable for the hazard.
- Wear safety toed shoes.
- Don't wear loose clothes, loose hair, gloves, or jewelry that could get caught in the point of operation.



# [ Use Tools Safely ]

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- Read and follow the manufacturer's instructions.
- Keep moving parts and sharp edges away from your body.
- Use a vise or clamps to secure materials, so both hands can operate the tool.
- Turn off a tool before you put it down.

# [ Practice Good Housekeeping ]

- Keep cords off the floor, so they don't become tripping hazards.
- Keep the work area clean; place combustible trash in closed containers.
- Store power tools properly when not in use.
  - Don't leave a tool where it could be turned on accidentally or fall on someone.

# [ Conclusion ]

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- Don't treat power tools as toys.
- Practice all aspects of machine and electrical safety to prevent injuries.
- Choose the right tool for the job.
- Use a tool only after checking that it has all its parts and that it's in good condition.

# [ Conclusion ]

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- Keep guards in place.
- Be sure cord insulation is intact and undamaged.
- Place 3-pronged plugs only in 3-pronged outlets.
- Keep cords away from sharp edges and off the floor.
- Don't yank tool cords.

# [ Conclusion ]

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- Carry tools by their handles, not their cords.
- Take your finger off the switch while carrying a plugged-in tool.
- Use only non-sparking tools in areas that contain flammables.
- Wear safety goggles, and, when it's very dusty, use a suitable respirator.

# [ Conclusion ]

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- Avoid wearing loose clothes, gloves, jewelry, unrestrained long hair that could get caught in a point of operation.
- Turn a tool off before adjusting or fixing it.
- Operate tools according to the manufacturer's instructions.
- Keep moving parts and sharp edges away from your body while operating tools.
- Store tools properly when they're not in use.

# [ Conclusion ]

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- Never yank the cord or hose to disconnect it.
- Disconnect tools when not in use, before servicing, and when changing accessories.
- Keep cords and hoses away from heat, oil and sharp edges.
- Keep work areas well lit.

# [ Conclusion ]

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- Keep others at a safe distance away from the work area.
- Secure the work with clamps or a vise—keep both hands free to operate the tool.
- Keep secure footing and maintain balance.



# [Portable Power Tool Safety Quiz]

1. Safety standards require some portable power tools to have guards.
  - a. True
  - b. False
2. Before you start any job with a portable power tool, you should:
  - a. Check to see if it is a name brand.
  - b. Inspect it to see that all parts are in place and in working order
  - c. Pull on the cord to make sure it's plugged in.
3. To protect a tool's electrical cord, keep it:
  - a. Away from sharp edges
  - b. Away from conductors
  - c. On the floor
4. If a portable power tool needs to be fixed or adjusted:
  - a. Turn it off first.
  - b. Keep it turned on so you can check whether it's working properly.
  - c. Perform adjustments with a nonsparking tool.

# [Portable Power Tool Safety Quiz]

5. The safest way to carry a power tool is by its cord.
  - a. True
  - b. False
6. When working with portable power tools, the most important personal protective equipment is usually:
  - a. Gloves
  - b. Industrial safety glasses with side shields
  - c. Hard hat
7. A key reason to avoid wearing loose clothes when working with power tools is that they could:
  - a. Get dirty
  - b. Block your view of the work
  - c. Get pulled into the tool's point of operation

# [Portable Power Tool Safety Quiz]

8. Power tool safety includes keeping its moving parts and sharp edges away from your body.
  - a. True
  - b. False
9. If a tool cord is well-insulated, you can use it around flammable materials.
  - a. True
  - b. False
10. One important reason to properly store a tool you're not using is to keep it from:
  - a. Falling on someone
  - b. Being noticed by a safety inspector
  - c. Running out of power