



## GOALS

This safety session teaches employees to:

- Understand the hazards of portable power tools.
- Know how to work safely with portable power tools.

**Applicable Regulations: 29 CFR 1910.242–.244; 29 CFR 1910.134**



### 1. 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

### 2. Tool design provides some protections.

- Leave all guards in place. The Occupational Safety and Health Administration (OSHA) requires 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.

### 3. Use the right tool for the job.

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

### 4. 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.

### 5. 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.



## 6. Use personal protective equipment.

- 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.

## 7. Use tools safely.

- 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.

## 8. 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.



### DISCUSSION POINTS:

- Use portable power tools to illustrate this session.
- Ask participants to describe accidents or near misses they've experienced with portable power tools and how they would now prevent them.



### CONCLUSION:

- Don't treat power tools as toys.
- Practice all aspects of machine and electrical safety to prevent injuries.



### TEST YOUR KNOWLEDGE:

Have your employees take the Portable Power Tool Safety quiz. By testing their knowledge, you can judge their ability to work safely with portable power tools and whether they need to review this important topic again soon.



## PORTABLE POWER TOOL SAFETY QUIZ

- The Occupational Safety and Health Administration (OSHA) requires some portable power tools to have guards.**
  - True
  - False
- Before you start any job with a portable power tool, you should:**
  - Check to see if it's certified by OSHA.
  - Inspect it to see that all parts are in place and in working order.
  - Pull on the cord to make sure it's plugged in.
- To protect a tool's electrical cord, keep it:**
  - Away from sharp edges
  - Away from conductors
  - On the floor
- If a portable power tool needs to be fixed or adjusted:**
  - Turn it off first.
  - Keep it turned on so you can check whether it's working properly.
  - Perform adjustments with a nonsparking tool.
- The safest way to carry a power tool is by its cord.**
  - True
  - False
- When working with portable power tools, the most important personal protective equipment is usually:**
  - Gloves
  - Industrial safety glasses with side shields.
  - Hard hat
- A key reason to avoid wearing loose clothes when working with power tools is that they could:**
  - Get dirty
  - Block your view of the work
  - Get pulled into the tool's point of operation
- Power tool safety includes keeping its moving parts and sharp edges away from your body.**
  - True
  - False
- If a tool cord is well-insulated, you can use it around flammable materials.**
  - True
  - False
- One important reason to properly store a tool you're not using is to keep it from:**
  - Falling on someone
  - Being noticed by an OSHA inspector
  - Running out of power

When you have completed this quiz, turn it in to your supervisor.

Name: \_\_\_\_\_

Date: \_\_\_\_\_



## ANSWERS TO PORTABLE POWER TOOL SAFETY QUIZ

---

1. a. True.
2. b. Inspect it to see that all parts are in place and in working order.
3. a. Away from sharp edges.
4. a. Turn it off first.
5. b. False. Carrying the tool by its cord can damage the cord and create a risk of shock or electrical fire.
6. b. Industrial safety glasses with side shields. Gloves could get caught in the moving parts.
7. c. Get caught in the tool's point of operation.
8. a. True.
9. b. False. A spark from even a well-insulated tool could cause flammables to catch fire.
10. a. Falling on someone.