Portable Power Tool Safety
Goals

- 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

- 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

- 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

- 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

- 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

- 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.
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

- 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.
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

- 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 if 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