

Fact Sheet: DIY Power Tool Safety

Today, more homeowners are tackling do-it-yourself projects than ever before. But sometimes, their enthusiasm is accompanied by a lack of understanding of the inherent risks introduced by electricity.

Whether replacing a light fixture, repairing an outlet, or installing a home entertainment system, DIY home electrical work that is not done correctly can cause immediate injuries and electrocutions, and may introduce new dangers into the home.

As the weather gets warmer, homeowners tend to look beyond the interior and begin outdoor maintenance and improvement projects. Power tools are often used out of doors or in a garage or shed where the door should be open for adequate ventilation, especially when sanding. Power tools require skilled use, and can be deadly if not properly used or maintained.

Facts and Statistics

- The State of Home Safety in America report found that emergency departments reported more than 330,000 visits due to injuries associated with home workshop equipment in a single year.
- From 1993 to 2003, the Consumer Product Safety Commission (CPSC) reported 160 electrocutions associated with consumer products and appliances.
- During this time, power tools accounted for 10 percent of overall deaths.
- Ten percent of electrocutions involved ladders, which in most cases came into contact with overhead power lines while another 7 percent was caused by accidents caused by garden and farming equipment.
- Each year, between 20 and 30 people are killed from electrocutions resulting from electrical accidents with power drills, saws, sanders, hedge trimmers, and other electric power tools (CPSC). Most of these fatalities could be prevented by the use of a GFCI.

Safety Tips: Power Tools

Working with electricity requires thorough planning and extreme care, and safety should always be the foremost concern for anyone who is working on or around electricity. The following guidelines can be used to ensure your safety when using power tools:

- Use ground fault circuit interrupters (GFCIs) with every power tool to protect against electric shock hazards.
- If a power tool trips a safety device while in use, take the tool to a manufacturer-authorized repair center for service.
- When working with electricity, use tools with insulated grips to avoid electrical shock.
- Always plug power tools into a grounded outlet, unless they are double-insulated.
- Never use power tools near live electrical wires or water pipes, especially when cutting or drilling into walls where they could be accidentally touched or penetrated.
- Do not use power tools without guards or with an extension cord that exceeds 100 feet.
- When using power tools, personal protective gear should be worn where appropriate.