

You can find additional information on generators and generator safety from your electrician or at the following websites:

**Federal Emergency Management Agency (FEMA)**

[fema.gov/fact-sheet/using-generators-safely](http://fema.gov/fact-sheet/using-generators-safely)

**U.S. Consumer Product Safety Commission (CPSC)**

[cpsc.gov/Safety-Education/Safety-Guides/Carbon-Monoxide-Home/Generators-and-Engine-Driven-Tools](http://cpsc.gov/Safety-Education/Safety-Guides/Carbon-Monoxide-Home/Generators-and-Engine-Driven-Tools)

**American Red Cross**

[redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/power-outage/safe-generator-use.html](http://redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/power-outage/safe-generator-use.html)

**Centers of Disease Control and Prevention**

[cdc.gov/co/pdfs/Generators.pdf](http://cdc.gov/co/pdfs/Generators.pdf)

**Electrical Safety Foundation International**

[esfi.org/portable-generator-safety-generate-safety/](http://esfi.org/portable-generator-safety-generate-safety/)

**MLGW**

[mlgw.com/residential/portablegeneratorsafety](http://mlgw.com/residential/portablegeneratorsafety)

**If you have additional questions concerning portable generator safety, please contact MLGW's Reliability and Power Quality area at 528-4544.**

**NOTICE:**

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# Portable Generator Safety



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Retail purchases of portable generators have increased in the United States over the last several years as families and small businesses seek the convenience of emergency power during electric outages. As generators become more common, however, there also has been a rise in the number of injuries and deaths resulting from improper usage. MLGW offers the following advice concerning generator safety and encourages owners to read, understand and follow the recommendations included in the generator owner’s manual.

**Guidelines:**

- The main hazards associated with using a generator are carbon monoxide (CO) poisoning, electric shock and fire.
  - NEVER use a portable generator indoors – including a garage, carport, basement, crawlspace, or other enclosed or partially-enclosed area. CO gas can build up quickly.
  - A generator should only be operated outside on a dry surface away from doors, windows and vents. It should be protected from direct exposure to rain and snow, preferably under a canopy-like structure.
  - DO NOT plug the generator into a wall outlet. This practice, known as backfeeding, can cause an electrocu-
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tion risk to utility workers. This could also pose a fire hazard as the generated power may overheat your home’s wiring. The generator, as well, could be damaged when electric services are restored.

- Plug individual appliances into the generator using heavy duty, outdoor rated, UL-listed cords with a wire gauge adequate for the appliance load. Never run generator cords under rugs or carpets where heat might build up or damage to a cord could go unnoticed.
  - Follow the manufacturer’s instructions to properly operate and ground the generator.
  - Handle fuel carefully. Turn the generator off prior to refueling. Gasoline, kerosene and other flammable liquids should be stored outside of living areas in properly labeled, safety containers. Make sure you have an adequate supply of fuel.
  - Turn off or disconnect all appliances prior to operating a portable generator. Once the generator is running, appliances powered by the generator can be turned on one at a time.
  - When power is restored, make sure to unplug all appliances and lights connected to the portable generator.
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- Periodically run the generator to ensure it will start and run properly.
  - Determine the correct generator size by adding up all lighting and any necessary appliances that need to have back-up power. For example, the following are some typical appliances that might be connected to a generator along with their average running power usage:

5-100 Watt light bulbs	500W
Refrigerator	600W
Freezer	600W
Gas Furnace Fan	800W
Microwave	750W
<u>Space Heater</u>	<u>1500W</u>
<b>Total</b>	<b>4750W</b>

Based on the total running Watts, a 5000 Watt generator would be sufficient to provide back-up electric power for the basic essentials in a typical residential home until the electricity is restored.

A qualified electrician can also help you determine the proper generator size to fit your needs.

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