



BSA SAFETY MOMENT

PORTABLE GENERATORS

SUMMARY

Portable generators are a common tool when temporary or remote power is needed. In Scouting, these could be used at large district or council events, or at summer or winter camps. Generators can be incredibly helpful but do have some inherent dangers.

GENERAL INFORMATION

Always consult and follow the manufacturer instructions or user manuals for your portable generator. You should also be aware of the most common hazards associated with portable generator use, described below.

CARBON MONOXIDE POISONING

Carbon monoxide (CO) is a colorless, odorless gas created by internal combustion engines such as a portable generator. If generators are not adequately ventilated, CO poisoning can occur from breathing toxic engine exhaust. To avoid CO poisoning:

- Never use a portable generator inside a structure, building, or trailer. This includes partially enclosed areas (e.g., pop-up tents or pavilions wrapped in plastic, etc.).
- Store portable generators outside and keep away from doors, windows, and vents that could pull CO indoors.
- Never sleep in areas containing a portable generator. If generators are nearby, install CO monitors with audible alarms in the building or structure housing sleeping areas.
- If you experience CO poisoning symptoms (e.g., dizziness, headaches, nausea, etc.), get to fresh air immediately.

ELECTRIC SHOCK

Electrical hazards from generators are similar to home electrical hazards. However, additional risk occurs when users bypass safety devices such as circuit breakers. To avoid electric shock:

- Keep the generator dry and do not use in rain or in wet conditions. If you need to cover the generator, use it under a canopy.

RESOURCES

- American Red Cross—Safe Generator Use: www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/power-outage/safe-generator-use
- OSHA Fact Sheet—Using Portable Generators Safely: www.osha.gov/OshDoc/data/Hurricane_Facts/portable_generator_safety.pdf

- Never attach a generator directly to the electrical system of a structure unless done by a qualified electrician. Ensure the generator is properly grounded (consult user manual for proper method).
- Plug appliances directly into the generator or use grounded (three-pronged) extension cords that are appropriately rated in watts or amps for the intended use.
- Use ground fault circuit interrupters (GFCIs) or extension cords with built-in GFCI protection.

FIRE

To avoid fires:

- Check the approximate run times for the generators and try to plan so there is no need to refuel them in the middle of your activity. If refueling is needed, turn off the generator and let it cool down first; spilling gasoline on a hot generator could ignite the fuel.
- Store fuel in an approved gasoline can. Ask your local fire department if there are limits on the amount of gasoline that can be stored in one place.
- Store fuel outside in a locked area and away from heat sources such as fuel-burning appliances.

Note: The information contained in this Safety Moment was adapted from OSHA Fact Sheet—Using Portable Generators Safely and the American Red Cross Safe Generator Use webpage.

