

## Portable Generator Safety Guidelines

Portable generators provide a reliable backup source of electricity during outages. They can be used safely in multiple ways—there is no single “correct” method for every household.

However, there are just as many unsafe methods that can create hazards for people inside the home, visitors, and line workers restoring power. The guidelines below highlight the most

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### General Safety Principles

- **Read the manufacturer’s manual** before operating the generator.
  - **Never operate a generator indoors** or in enclosed/partially enclosed spaces such as garages, basements, crawl spaces, or sheds.
  - **Place the generator outdoors**, at least **20 feet away from your home**, with the exhaust pointed away from windows, doors, and vents.
  - **Install battery-operated carbon monoxide (CO) detectors** in your home—CO is odorless and deadly.
  - **Keep the generator dry**; run it under an open-air canopy or other rain-shielding structure where airflow is not restricted.
  - **Do not overload the generator**—check wattage ratings and only power essential devices.
  - **Never refuel a hot or running generator**; allow it to cool for at least 10 minutes.
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### Electrical Safety and Power Connections

**Avoid Backfeed Hazards** trying to power your home by plugging a generator into a wall outlet is extremely dangerous because:

- It can **energize utility lines**, risking electrocution for lineworkers restoring service.
- It can **damage your generator**, home wiring, and connected appliances.
- It is **illegal in many states** and violates electrical codes.

**Never plug a generator into a wall outlet (a.k.a. “suicide cord”).**

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### Extension Cord & Appliance Safety

If you’re not using a transfer switch or interlock:

- **Run appliances directly from the generator** using **proper outdoor-rated extension cords**.
- Use **12-gauge or heavier** cords for high-load appliances.
- Ensure cords are **free from damage**, kept **dry**, and routed to avoid tripping hazards.
- Plug in only the essential devices you need to run.

## Proper Ways to Connect a Generator to a Home

You may safely connect a generator to your home's electrical system *only* by using:

- **A professionally installed transfer switch**, which isolates your home from the utility grid.
- **A listed generator interlock kit** installed on your electrical panel by a licensed electrician.
- **A dedicated generator inlet box** wired to the transfer switch or interlock.

These systems ensure:

- Your home's circuits and the utility grid are **electrically separated**, preventing backfeed.
  - You can safely power selected circuits such as refrigerators, lights, sump pumps, and heating system controls.
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## Fuel & Fire Safety

- Store fuel only in **approved containers** away from living areas.
  - Keep fuel at least **50 feet from ignition sources**.
  - Turn off the generator before refueling to avoid ignition from hot engine components.
  - Follow local laws on fuel storage and generator use.
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## Maintenance & Operation Tips

- **Test your generator monthly** by running it for 10–15 minutes.
- Change the oil and air filter according to the manufacturer's schedule.
- Use **fresh, stabilized fuel** to prevent engine issues.
- Inspect cords, outlets, and the frame for any signs of damage before use.