Power outages: using alternative fuel and electricity generation safely

Community information

When power outages occur (usually as a result of a severe weather event) people sometimes use alternative sources of fuel or electricity generation for cooking, lighting, heating or power.

Portable generators can allow some normal activities to continue; however, it is important to use them carefully.

Petrol or diesel powered generators can produce carbon monoxide gas so **must only be operated in a well-ventilated outdoor area** away from open windows and vents.

Carbon monoxide is invisible and you cannot smell it. If it builds up in a home, garage or caravan it can cause sudden illness, loss of consciousness and death. Think about your pets as well as your family.

**Do not use appliances designed for outdoor use inside a home**, basement, garage, caravan or tent, or even outside near an open window. Appliances such as power generators, grills, camp stoves or other petrol, LP gas, natural gas or charcoal-burning devices should only be used as specified by the manufacturer.

**Power generators**

Although they are very useful, if not used safely portable generators can lead to:

- Carbon monoxide poisoning from the engine exhaust.
- Electric shock or electrocution.
- Fire.

Householders must follow the directions supplied with the generator to ensure safe use.

**Purchasing a generator**

Permanently installed stationary generators are best suited for providing back-up power to the home.

**Only a licensed electrician should connect a permanent generator.**

**Using a portable generator safely**

- **Do not use a portable generator indoors.** This includes inside a garage, carport, basement, crawlspace or other enclosed or partially enclosed area, even with ventilation.
- Operate the generator outdoors away from windows.
- Read the manufacturer’s instructions before use.
- Do not overload the generator.
- Switch the generator off when refuelling or when not in use.

Opening doors and windows will not prevent carbon monoxide building up in the home. It is a good idea to install battery-operated carbon monoxide alarms in your home to alert you when carbon monoxide levels pose a health risk. Test the battery frequently and replace when needed.

**To avoid electrocution**

- Keep the generator dry and do not use it in the rain.
- To protect the generator from moisture, use it on a dry surface under an open canopy-like structure, such as a tarpaulin held up on poles.
Always dry your hands before touching the generator.

Refuelling a generator

- Ensure the generator is off and cool before refuelling. Petrol spilled on hot engine parts can ignite.
- Store petrol outside the home in a locked shed or other protected area.
- Do not store any fuel near a fuel-burning appliance (such as a natural gas water heater or near a car in a garage).

Using appliances connected to a generator

If returning to a property that has been significantly damaged by fire or strong winds, it is important to first check the wiring and other electrical installations before connecting and turning on any appliances.

Additionally you should:

- Plug appliances directly into the generator via a heavy duty, outdoor-rated extension cord.
- Use short extension leads that are in good condition, and plugs that have all three prongs.
- Fully unwind extension leads from reels or drums.

Do not try to power the house wiring by plugging the generator into a wall outlet. This can ‘back feed’ along the power lines and is extremely dangerous to you and your neighbours.

Preventing carbon monoxide poisoning

- Never use a gas stove or oven to heat a home.
- Never use a charcoal grill, hibachi, lantern or portable camping stove inside a home, tent or caravan.
- Never run a generator, pressure washer or any fuel-powered engine inside a basement, garage or other enclosed structure, even if the doors or windows are open, unless the equipment is professionally installed and vented.
- Keep vents and flues free of debris, especially if winds are high, as flying debris can block ventilation openings.
- Never run a motor vehicle, generator, pressure washer or any fuel-powered engine outside an open window, door or vent where exhaust can vent into an enclosed area.
- Never leave the motor running in a vehicle parked in an enclosed or partially enclosed space such as a garage.
- If you start to feel sick, dizzy or weak, get to fresh air immediately and get immediate medical advice.

For further information

- For information about safely using gas or electricity contact Energy Safe Victoria on 9203 9700 or visit: [www.esv.vic.gov.au](http://www.esv.vic.gov.au)
- To report a gas leak call 132 771.
- For information about the health effects of carbon monoxide exposure ask your local doctor.
- For general health information about carbon monoxide contact the Environmental Health Unit at the Department of Health and Human Services on 1300 761 874.