

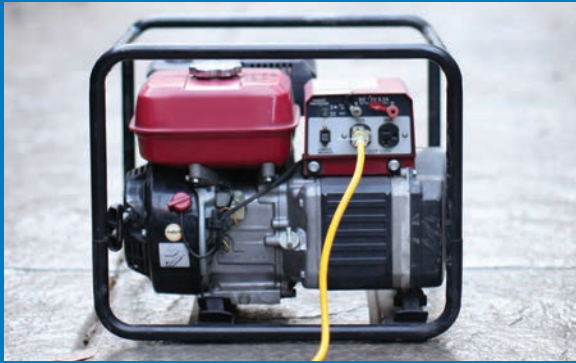
# Home Generator Safety



**Having a back-up generator can be convenient, but safety is key both for you and utility workers.**

*Clark  
Public  
Utilities* 

## A generator's biggest danger: BACKFEED



When the power goes out it can be tempting to fire up a portable generator and plug it into a wall outlet in your home. This is a potentially fatal move, unless you first disconnect from the utility's electric system. A working generator plugged into a wall outlet can feed electricity into power lines that utility crews presume aren't energized. A line crew working to restore electricity service can be seriously injured or killed by this "backfeed" of power.

Standby electricity generators are often installed in places like hospitals that rely on power to protect patients. But today, many people are also installing generators in homes and businesses to keep important equipment running if the power goes out.

If you invest in a generator, it's important to install it correctly and operate it safely. We encourage you to talk with electrical suppliers and contractors about your options. Most vendors are familiar with the utility's safety requirements for standby generation and can help you select the best equipment for your needs.

**Noise:** *This is probably as big a concern to your neighbors as it is to you. Gasoline-powered generators have decibel ratings, and the lower the rating the quieter the generator. Position the generator outside to shield its noise as best you can.*

## Portable generators

Portable generators are the least expensive alternative for emergency power, particularly if you need 5,000 watts of electricity or less. Because of the fumes they produce, these generators should always be operated outside. Portable generators are usually powered by gasoline and can be moved as needed to power particular appliances or other equipment. For example, if the power goes out and you want to keep your refrigerator operating, you can fire up your generator outside and plug the refrigerator into it using an extension cord. Be sure to use an extension cord that's approved for outdoor use and has three wires, one of which is grounded.

## Permanent generators

Generators can also be wired directly into the electrical system of your home. This is a more expensive option and one that requires the help of an electrician. Permanent generators can be worth the extra expense if you want enough emergency electricity to keep several appliances operating and if you expect to have to use the generator fairly frequently. The installation of a permanent generator must be in compliance with the National Electric Code and codes of local enforcing authorities. You can get code information from state electrical inspectors at the Washington Department of Labor and Industries office in Vancouver. Your generator supplier may not have all the necessary code information, but the electrical contractor installing the generator should comply with all existing codes. A permanent generator must include a "transfer switch," which prevents power from the generator from feeding into utility lines. This transfer switch must be a "break before make" type — that means the connection to the utility power system will be cut off before the generator starts to produce power. Please note that an electrical permit is needed prior to installing a permanent generator.

***We strongly advise you to hire an electrician if you're installing a permanent generator in your home.***

If you have any questions, call 360-992-3000 and speak with a Clark Public Utilities customer service representative. You can call for information 24 hours a day, seven days a week.

## Other things to consider

### Power and reliability

How much emergency power do you need? How often do you think you'll need it? Will it be used for anything other than an emergency? Answering these questions will help you choose the size and type of generator you should buy and whether you should shop for a less expensive version or a top-of-the-line model.

### Fumes

Generators must be placed in well-ventilated areas outside, away from windows, doors or ventilation intakes that could allow exhaust fumes into your home.

### Fuel and oil

If you expect long, unattended operation of your generator, check that fuel capacity and low-oil protection features are adequate for extended use. For an additional charge, most generators can be converted to the fuel of your choice.

### Emergency preparation

Even with a generator, it's important to be prepared. Check the Red Cross website for a list of emergency supplies all households should have on hand.



Learn more at  
[clarkpublicutilities.com](http://clarkpublicutilities.com) or 360-992-3000

