



Methuen Fire Department

24 Lowell Street Methuen, Massachusetts 01844 - 6825

Telephone: 978-983-8940 Fax: 978-691-5056

Business Office: 978-983-8910

Stephen N. Zanni
Mayor

Steven R. Buote
Fire Chief

Portable Generator Safety Tips

Before reading these tips, always read the Owner's Manual and instructions for your portable generator, which also references portable generator safety tips. Carefully follow all instructions and warnings in order to safely start and operate the generator. Do **NOT** cut corners when it comes to safety.

These tips are merely supplemental and are not intended to substitute reading of the Owner's Manual.

When it comes to generators there are a lot of factors to watch out for, but portable generators have additional safety concerns because they are portable and not already pre-installed in desired locations. This makes portable generators more susceptible to other dangerous issues such as moving indoors and causing carbon monoxide poisoning or using one near flammable equipment, which could lead to fires.

Carbon Monoxide (CO) poisoning from generator use causes an annual average of 81 deaths. The majority of the deaths occurred as a result of using a generator inside a home's living space, in the basement or in the garage.

One generator produces as much CO as hundreds of cars. CO from a generator is deadly and can incapacitate and kill you within minutes.

Portable generators are useful when temporary or remote electric power is needed, but they can be hazardous. The primary hazards to avoid when using them are carbon monoxide poisoning, electric shock or electrocution, and fire.

The City of Methuen Fire Department would like you to know that there are simple steps that you can take to prevent the loss of life and property resulting from improper use of portable generators.

To Avoid Carbon Monoxide Hazards:

One of the most dangerous problems with portable generators, and generators in general, is that they produce a high amount of carbon monoxide, way more than idling cars. That is why portable generators should never be used indoors or in partially enclosed areas with little or no ventilation. Even using a portable generator near a home or enclosed area can lead to buildup of CO. The CO can build up quickly and lead to serious injury or death. Carbon monoxide is not visible and its smell is not noticeable and a leak or buildup of it can go undetected. Using a generator indoors **CAN KILL YOU IN MINUTES**. Exhaust contains carbon monoxide, a deadly poison gas you cannot see or smell.

1. Always use generators outdoors, away from doors, windows and vents.
2. **NEVER** use generators in homes, garages, basements, crawl spaces, or other enclosed or partially enclosed areas, even with ventilation.
3. Using a fan or opening doors and windows will not provide sufficient ventilation.
4. Follow manufacturer's instructions.
5. Install battery-operated or plug-in (with battery backup) carbon monoxide (CO) alarms in your home, following manufacturer's instructions.
6. Test CO alarms often and replace batteries when needed.

To Avoid Electrical Hazards:

Because portable generators are designed to produce electrical power, there are certain to be some electrical hazards. Portable generators produce electricity and should never be used in the rain or other wet conditions where the water could mix with the electricity and lead to electrical shock. The same concept applies to all electronics in that no wet hands should be used to touch any electrical tool including portable generators. The load of the portable generator should also be checked. Plug in only the wattage the generator is rated for and use only 3 pin, grounded cords to insure extra safety. Never run cords under carpets or other objects that can store the heat produced. Never plug a generator into a wall socket to try and power a house. This can lead to electrical damages to the house, the generator, and electrocution of utility workers trying to fix problems.

1. Keep the generator dry. Operate on a dry surface under an open, canopy- like structure.
2. Dry your hands before touching the generator.
3. Plug appliances directly into generator or use a heavy-duty outdoor- rated extension cord.
4. Make sure the entire extension cord is free of cuts or tears and the plug has all 3 prongs, especially a grounding pin.
5. **NEVER** plug the generator into a wall outlet. This practice, known as backfeeding, can cause an electrocution risk to utility workers and others served by the same utility transformer.
6. If necessary to connect a generator to house wiring to power appliances, have a qualified electrician install appropriate equipment. Or, your utility company may be able to install an appropriate transfer switch.
7. Always start or stop the generator only when no electrical loads are connected.
8. Overloading your generator can seriously damage your valuable appliances and electronics. Do not overload the generator. Do not operate more appliances and equipment than the output rating of the generator. Prioritize your needs. A portable electric generator should be used only when necessary, and only to power essential equipment.

To Avoid Fire Hazards:

Portable generators can cause fires if not used properly or if the fuel supply is not stored in a safe place.

1. Fuel for portable generators is flammable and should be stored in labeled containers.
2. It should be stored in well-ventilated areas where there are no heating appliances.
3. It should not be stored in areas that get extremely hot.
4. Gasoline is extremely flammable and explosive.
5. Gasoline should not be transported in or stored in closed automobiles.
6. Before refueling a portable generator, take precaution by turning it off and letting it totally cool off before adding the fuel. This will prevent possible fuel ignition. Fuel spilled on hot engine parts could ignite.
7. A portable generator should always be used only in fire safe locations where it will not ignite any fuel or other items.
8. Never store a generator with fuel in the tank where gasoline vapors might reach an open flame, spark or pilot light.
9. Do not smoke near fuel or generator.
10. Always store fuel outside of living areas in properly labeled, non-glass containers.
11. Store fuel away from any fuel-burning appliance.
12. Many generator parts are hot enough to burn you during operation and while the generator is cooling after turning off. Avoid coming into contact with a hot generator.

Generator Placement and Operation:

1. Keep children away from portable generators at all times.
2. Allow at least five feet of clearance on all sides of the generator when operating.
3. Generators can be used during a wide variety of weather temperatures, but should be protected from the elements when not in use to prevent shorting and rusting.
4. Operate the generator only on level surfaces and where it will not be exposed to excessive moisture, dirt, dust, or corrosive vapors.
5. Inspect the generator regularly and contact the nearest authorized dealer for parts needing repair or replacement.
6. Always disconnect the spark plug wire and place the wire where it cannot contact the spark plug to prevent accidental starting when setting up, transporting, adjusting or making repairs to the generator.

These guidelines can help prevent serious injury and death when followed. There are a lot of safety issues when using portable generators so take precaution on using them. Portable generators are a great tool and resource, especially when needed for emergency power. Please follow all safety precautions when operating portable generators for a safe and accident free experience.

Steven R. Buote, Fire Chief
Methuen Fire Department