

Dark and Stormy Nights

**60 SECONDS TO BLACKOUT?** Branches laden with heavy, wet snow can snap suddenly—taking down power lines with them.

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As extreme weather becomes more common across the country, the decision about whether to buy a generator is more urgent than ever. Here's what you need to know.

**Y**OU'RE SETTLED IN SAFE AT HOME when suddenly the lights go out and the comforting hums of fridge and furnace go dead. As you rummage around in a drawer for the flashlights and batteries, you're probably kicking yourself for not investing in a generator after the last storm. Don't let that happen during the next one. The best of the 45 generators we tested supply power for everything from the bare necessities to your whole house. Some generators deliver more juice than others. Some, including pricey inverter models, provide power that's cleaner

and won't make appliances run hotter and sensitive electronics run less reliably. Others include smart features, such as automatic shutdown if engine oil gets low. Here's advice on how to choose one wisely, install it properly, use it safely, and keep it running as long as possible.

**CHOOSE STATIONARY OR PORTABLE.** Stationary models are significantly more expensive, but they start automatically when the power goes out and often supply more power than portables. They also periodically run a self-diagnosis routine that can alert you, via the display panel or sometimes text or e-mail.

Running on natural gas or propane, they save you the hassle and safety risks of storing gallons of gasoline.

In addition to costing less, portables can be transported easily to another location. If you go for a portable, one handy new feature to look for is a removable console, connected via cable to the generator. You can plug directly into the console without running extension cords to the generator, which we don't recommend.

**KNOW YOUR POWER NEEDS.** Unless you want the generator to keep the whole house running, compile a list of priorities for what you want your portable model to power. At the very least you'll probably want to make sure essentials such as the refrigerator, sump pump, and heating system stay on. Additionally, you can map every outlet and switch in the house so that you'll know which circuit on your service panel powers what. Two people on cell phones can do that easily. Leave one person manning the panel while the other goes from room to room, checking what works as circuits are switched on and off. A circuit finder, \$25 to \$30, can help identify which circuit on your service panel powers a given receptacle.

Of course, for a fee a pro can also perform that diagnosis for you. The list of circuits will help you determine just what you want your generator to target. (See "How Much Generator Do You Need?" on page 18.)

**CONSULT A PRO.** Whichever type

of generator you choose, consult an electrician to ensure proper selection and installation. If you already know which items in your home you'll want to power, you could save hundreds by not paying for the labor required to map the circuits. If you're going for a stationary model, a pro should be able to help with your town or municipal requirements for proper location on your property, noise restrictions, and obtaining permits.

**CONSIDER THIS UPGRADE.** Extension cords are a hassle, and they can be hazardous. A transfer switch, about \$500 to \$900 with labor to install, links the generator to your circuit panel. That lets you power circuits, including those for hardwired appliances, directly. You'll need at least a 5,000-rated-watt generator to use one.

**KEEP UP WITH MAINTENANCE.** For a stationary generator, make a habit of checking its display to see whether maintenance is required. For a portable, your owner's manual will tell you how often to change the oil and which type to use. If your generator uses gasoline, add stabilizer to all of your stored fuel.

**ALWAYS OPERATE SAFELY.** Never run a generator indoors; it creates deadly levels of carbon monoxide. It should be run at least 15 feet from the house, away from doors and windows, and never in the basement, the garage, or any other enclosed space. Don't run a portable in the rain; model-specific tents are available online.

## STORM SPEAK

'Superstorm' is now part of our lexicon. But just what made 2012's Sandy so super? A hurricane followed by a nor'easter, it packed a potent one-two punch. Winds of 80-plus mph, epic waves, and the storm surge pummeled the East Coast—killing at least 147 and causing about \$50 billion in damages.

## Are You Safe in the Hospital if the Lights Go Out?

It's a nightmare scenario that no hospital patient wants to consider: What if a storm knocks out lifesaving technology?


Ten years ago, more than 200 patients died after generators at several New Orleans hospitals and nursing homes failed during Hurricane Katrina. Three years ago, two New York hospitals—Bellevue Hospital Center and NYU Langone Medical Center—were evacuated when generators failed during Superstorm Sandy.

Hospitals must have backup power, and the Joint Commission, which accredits hospitals, says the facilities must test diesel generators at least 12 times annually. Thankfully, hospital power outages are rare—an average of one per year, according to a survey by the American Society for Healthcare Engineering.

Still, even one outage can be catastrophic, and experts have identified several weak spots. First, many generators are 50 or more years old, and they may be in basements, making them vulnerable to floods. Yet most hospitals can't afford to move the generators, and federal and state governments aren't likely to pick up the tab. In addition, though hospitals have emergency plans, there's no way to know how good they are until disaster strikes.

So if you or a family member enters a hospital during hurricane or tornado season, Dan Hänfling, M.D., co-chairman of the Institute of Medicine's Forum on Medical and Public Health Preparedness for Catastrophic Events, says you should prepare for the worst:

- **Plan for early discharge.** If a natural disaster looms, hospitals often discharge patients early, provided patients are well enough. So ask a family member or friend to be on call in case you need to be picked up early (and to care for you when you get home). And before you leave, get prescriptions filled and ask what you need to do when you get home.
- **Know evacuation plans.** Ask the hospital where it will move patients if it decides to evacuate. And in case you can't go home, find out where the nearest emergency shelter is.



### LEARN

Read more about what to do if a natural disaster strikes while you're in the hospital: Go to [ConsumerReports.org/cro/hospital-emergencies](http://ConsumerReports.org/cro/hospital-emergencies)