

## How to install plywood

Plywood hurricane shutters can be far more effective when they are installed inside window frames instead of nailed into walls, hurricane experts said.



### THE CORRECT WAY

By cutting the plywood to fit snugly inside window frames, the wind is far less able to get underneath and tear it away. The wood should be attached to the inside of the window sill using barrel bolts (pictured at left). This style performed well even in 1992's devastating Hurricane Andrew. It should work on any window frame at least two inches deep.



### THE GOOD ALTERNATIVE

- For concrete block walls, use lead-sleeve anchors.
- Use 2 1/2-inch long bolts and screws.
- Use CDX plywood at least 5/8 inch thick.
- Place plywood over window, allowing a 4-inch overlap on each side.
- Space bolts or screws 12 to 18 inches apart.



### THE WRONG WAY

Some people install homemade wood shutters by nailing plywood to the outside of window frames. This might survive weaker hurricanes, but strong winds can seep under and pull the plywood off, removing any protection.

#### TIPS

- Use exterior plywood and 3- or 4-inch heavy-duty barrel bolts.
- Set plywood in 2 inches deep.
- Have bolts in the center of each side of the frame to keep it secure. For larger windows, use one bolt every two feet.
- The holes in the window frame should be just large enough for the bolt.
- Measure every side of the window frame for a snug fit.
- Use 2x4 lumber or full-length piano hinges to connect pieces of plywood for extremely large windows, such as sliding glass doors. Waterproof with varnish or paint.

## A GUIDE TO POWER GENERATORS

### Choosing a generator

Plenty of South Floridians go about their regular household routine when a storm knocks out the electricity. Generators power up and these folks are heating soup, playing video games and enjoying hot showers.

Various types of generators are available, with a wide range of price and power. Some generators energize a few appliances, while others keep the whole house running.

Your budget is a key factor in selecting a generator. Prices, including labor when necessary, range from about \$400 to \$60,000 and up. You should also consider how much wattage you need and which generator styles are suitable based on your property restrictions.

### TWO TYPES

Generators fit into two broad categories -- portables and stand-by or whole-house generators. Portables run on gasoline and are often connected by heavy-duty extension cords to appliances. Permits generally are not required, unless there is a switch that's professionally wired into the home. Stand-by or whole-house generators require propane or natural gas and are hard-wired into the home. Inspections and permits are required by local building departments.

Portable generators have a more affordable price and simpler set-up. The homeowner buys one, rolls it to a safe place outdoors and plugs in the appliances. Drawbacks include the need to refuel with gasoline and the limited number of appliances portables can power.

The key benefits of stand-by generators are strong power potential and relatively hassle-free start-up when the electricity goes out. The drawbacks include the expense and requirements involved with installation. Ordering, obtaining permits and installation of stand-by generators may take two to six months. Fuel is another issue with stand-bys. If natural gas isn't available, the property needs to be appropriate for installing an outdoor propane tank.

FPL Readi-Power, a business affiliated with FPL, sells an especially powerful portable generator along with an installation package that includes professional wiring of a transfer switch, said Gayle Faath, marketing manager for Readi-Power. The PortablePowerPLUS offers substantial wattage -- enough to run a five-ton central air-conditioner, Faath said. The \$5,998 price includes a 17½-kilowatt generator, gasoline containers, permits, delivery and set-up. The process usually requires about five weeks, she said.

While portables often involve running extension cords to various appliances, the PortablePowerPLUS package includes the installation of a manual transfer switch connected to the home's electrical panel. The homeowner plugs the portable generator into the transfer switch, and then selects which appliances to power using the circuit breaker switches.

### STAND-BY GENERATORS

<b>BRAND</b>	Briggs Stratton	& Centurion	Rheem
<b>WATTS</b>	10,000 Watts	16,000 Watts	20,000 Watts

### PORTABLE GENERATORS

<b>BRAND</b>	Powermate	Troy-Bilt	Coleman
<b>WATTS</b>	2,250 Watts	5,000 Watts	5,000 Watts

## Portable choices



The PortablePowerPLUS offers enough wattage to run a five-ton central air-conditioner.

Lowe's sells portable generators from John Deering and Troy-Bilt ranging from five to eight kilowatts. The Troy-Bilt 5000-watt Electric Start, at \$698, is among the most popular, said James Inman, store manager for Lowe's in Homestead. Annette Sanchez, the store's install sales manager, said that model would be sufficient to simultaneously power a refrigerator, a window air-conditioning unit, a television and a light.

Home Depot's array of portable generators range from 1.8 kilowatts to 12.5 kilowatts, priced from \$399 to \$1,999. Generators are also sold at a number of other stores.

The stand-by products at Lowe's range from seven to 45 kilowatts, and are priced from \$1,995 to \$10,995 for the units. Add to that installation fees of about \$1,600 to \$1,850, plus putting in a propane tank, if necessary, which probably would cost about \$4,500 to \$7,500, Sanchez said.

For a generator powerful enough to run a central air-conditioning unit, Sanchez recommends at least a 10-kilowatt unit. A popular version, the Lowe's staff said, is the Centurion 5250, with 16 kilowatts. Price, including installation, is \$5,245. That doesn't include the natural gas or propane fuel source. That unit would power a five-ton A/C unit, and most other household appliances, Sanchez said.

FPL Readi-Power sells stand-by generators ranging from 25 kilowatts to 130 kilowatts. "It's totally automatic," Faath said. "Every week, it exercises itself so it stays in optimal running condition."

The price for the stand-bys, including installation and related fees, ranges from about \$25,000 to \$60,000 for most South Florida homes. Installation, with permits and other preliminary aspects, usually takes four to six months, she said.

A stand-by generator that runs the whole house relatively efficiently is a Rheem 20 kilowatt version, said Hiram J. Frank of Personalized Power Systems, based in Boca Raton. He says it can automatically adjust the power load based on the appliances being used. With the automatic load-shifting device, a whole house is powered with a smaller, less expensive generator that uses less fuel, he said. The package, including installation and propane tank, if necessary, usually costs about \$20,000 to \$25,000 and takes about one or two months for permits and installation, Frank said.

At Kohler Power Systems, Melanie Tydrich says the 17-kilowatt version is among the more popular generators. That amount of power is sufficient for a home of about 3,000 square feet, she said. Accessories also are available for generators. Among them is Kohler's remote monitoring system that allows the owner to use a laptop to turn the generator on or off, even while away from home. If service is required, the generator sends e-mails or text messages.

## Wattage requirements for appliances

ITEM	WATT USAGE
Lights (8 x 75 watts)	600
Refrigerator	700
Box fan	200
Microwave oven (midsize)	1,000
Coffee maker	1,000
Toaster	850
TV (27 inches)	500
Radio	100
Hair dryer	1,200
Security system	1,200
Window AC (10,000 BTU)	1,200
Central AC (10,000 BTU)	1,500
Central AC (24,000 BTU)	3,800
Well pump	1,000
Electric water heater	4,000
Electric stove	2,100
Washing machine	2,100
Computer and monitor	800
Inkjet printer	80
Copier	1,600

Source: Home Depot

### Working with contractors: avoiding scams

Be sure the business hired to install a generator is reputable and responsible.

Verify that a contractor holds a valid license for work in the specific trade. For work in Broward County or Miami-Dade County, a contractor should hold a license from the specific county or from the state of Florida.

- Broward County Contractor Licensing and Enforcement, 954-765-4400, [www.broward.org/building](http://www.broward.org/building).
  - Miami-Dade County office of Building Code Compliance, 311, [www.miamidade.gov/buildingcode](http://www.miamidade.gov/buildingcode) or 311.
  - Florida Department of Business and Professional Regulation 954-917-1330.
- Other tips for hiring a contractor:
- Avoid contractors who require large payments before doing the work. The payments should reflect approximately the work that's been done.
  - Avoid paying in cash. A check, written to the business contracted to do the work, offers a record.

- Be wary if the contractor requests that the resident obtain a permit. A licensed contractor in good standing should obtain the permits.
  - Request that a proposal, contract or agreement be submitted in writing.
  - Do not sign a completion certificate, until all the work is completed according to the contract, your satisfaction and all required inspections and approvals from the appropriate building department.
- Sources: Broward County Building Code Services Division Contractor and Licensing Enforcement*

### **Generator safety tips**

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- Read labels and follow instructions in the owner's manual.
  - Use portable generators outside only, away from the house. Also keep the generator away from vents, windows and doors -- including those of neighbors.
  - Install CO (carbon monoxide) alarms with battery backup in the home, near sleeping areas.
  - Turn off all connected appliances before starting your generator.
  - Turn connected appliances on one at a time, never exceeding the generator's rated wattage.
  - Start the largest electric appliance first, then plug in other items, one at a time.
  - Ground the generator to avoid accidental electrical shock.
  - Use appropriate extension cords. Use a larger gauge three-wire, three-prong cord when using an appliance or tool a distance away.
  - Don't refuel a generator that is running or hot.
  - Don't touch a generator if you are wet or are standing in water or on damp ground.
- Sources: Florida Power and Light, Lowes.com and Consumer Product Safety Commission*

## INSURANCE

### Homeowners look to local insurers

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The last two hurricane seasons have been kind to Florida. But it's fear of what lies ahead that gives many insurers pause over selling homeowners policies in this state.

Agents say they're seeing a few more companies providing coverage. It's coming from home-grown firms and regional companies. Meanwhile, major national insurers such as State Farm, Allstate and Nationwide are dropping policies.

Some carriers are dropping rates as they compete with Citizens Property Insurance, said Gaby Dominguez, who heads Avante Insurance in West Miami-Dade.

Dominguez says she was able to switch her own homeowners insurance to a new carrier and save about 50 percent on her annual premium.

Young, Florida-based companies such as Coral Insurance, Cypress Property & Casualty, Universal Property & Casualty and Magnolia are among the insurers writing policies, she said.

It's not blanket coverage. These insurers are still avoiding some areas -- the ones closer to the coast, generally east of U.S. 1 and Interstate 95 in South Florida. Some carriers are willing to inch closer to the I-95 dividing line and will write multi-peril policies that include wind coverage.

Dominguez said she's switching clients from their current insurer to a new one with lower rates even before the policy expires.

### WINDSTORM COVERAGE

Nestor Rivero with Tropical Insurance in Miami said homeowners closer to the water are still ending up with Citizens, the state-run insurer, for windstorm insurance. But he's seeing some insurers willing to take on older homes that have been updated -- the ones that many companies had been avoiding since the storms of 2004 and 2005.

Rates for Citizens will remain frozen through 2009, based on a new insurance bill passed by the Florida Legislature in early May.

The state-run insurer is required to file new rates in 2010 that are actuarially sound. That means Citizens' rates would be set at a level that allows the insurer to bring in enough in premiums so that it can pay future claims without running out of cash. Setting rates at such a level would require a big price increase.

That means homeowners in South Florida, where more than 500,000 are covered by Citizens, could see sizable rate increases. But lawmakers believe they could be back in Tallahassee next year to look for ways to phase in those future increases.

The new law eliminates the distinction between homesteaded and non-homesteaded properties for setting rates and charging assessments. That's a big relief for Floridians who own second homes covered by Citizens.

### UP TO \$2 MILLION

Also, homes valued up to \$2 million can continue to be insured by Citizens; higher valued homes need to find a new insurer by Jan. 1.

A big plus in the new insurance law is a revised schedule for setting surcharges in case Citizens suffers a future deficit.

Citizens' own policyholders will still bear the brunt of making up a deficit for the insurer. After a catastrophic storm, Citizens policyholders could be assessed up to 45 percent of their annual premium in one year.

If a deficit still exists, all other policyholders in the state, except medical malpractice and workers comp, would see a surcharge of 6 percent added to their policies for one year.

The state-run insurer is required to file rates in 2010 that are actuarially sound.

Until now, nearly every policyholder in the state was assessed equally at a maximum of 10 percent.

A group of companies have been taking policies off Citizens in the past year. These carriers are required to set rates at or below what Citizens charges.

But homeowners, not their agents, have the last say about whether they stay with the state-run insurer or leave.

The Office of Insurance Regulation has set up a website to help consumers research these takeout companies. Go to [www.floir.com/TakeoutCompanies.aspx](http://www.floir.com/TakeoutCompanies.aspx).

When it comes to saving money on insurance premiums, mitigation, as Bruce Douglas, chairman of Citizens' board of governor, says, may be the only long-term solution for lower overall insurance costs because homes that can better withstand storms mean fewer claims for insurers.

Consumers can still apply for a free home inspection through the My Safe Florida Home program. But there is a considerable wait. Or, they can chose to pay for the inspection -- costs run between \$125 and \$175 -- and submit the certified form to their insurance agent to send to their insurer.

Officials with My Safe Florida Home say the savings average \$200, but the credits applied by insurers differ from company to company.

### **Storing important papers**

Among the important items to protect during a storm are your documents. Have a reliable system for storing important documents even without the threat of a hurricane. If possible, documents that can't be replaced should be stored in a bank safety deposit box.

Other documents can be replaced but take time and effort to do so. These can be stored at home in a rugged, waterproof container.

Among the documents and records you should protect:

- Ownership documents, such as your warranty deed or car title.
- Lease agreement/mortgage.
- Proof of occupancy, such as a utility bill.
- Bond and stock issues.
- Birth certificates.
- Wills, passports, Social Security cards.
- Banking information.

Gather originals and make copies of:

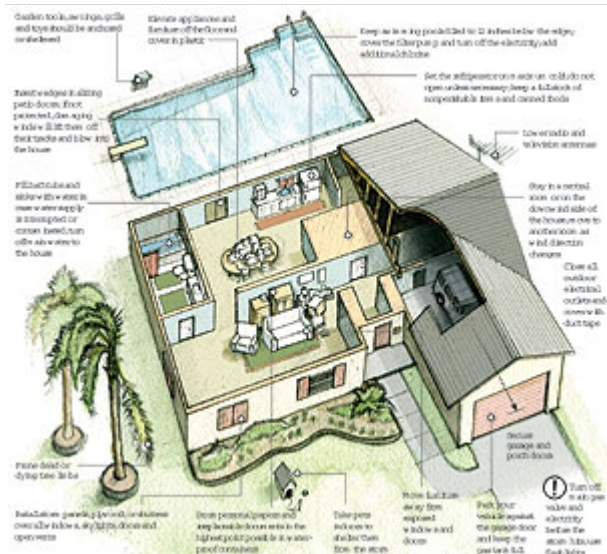
- A document showing the name of your insurance company and your insurance policy number. It could be the insurance binder or your last bill.
- The name, address and phone number of your insurance agent. List of important phone numbers.
- Receipts or canceled checks for home furnishings to help you document your losses on claims for insurance and tax deductions.
- Photographs of each room of your house.
- A document that shows the name, address and phone number of your mortgage holder and your account number.
- Medical records, such as vaccination histories.
- Any other documents that show proof of value, such as a recent assessment of your home.
- Photocopy all cards you keep in your wallet: driver's license, credit cards, medical insurance cards, ATM cards. On the photocopies of your bank cards, write the phone number for reporting a lost card.



- Scan the copies into a computer and store on a disc. Or get two 8-by-11 manila envelopes. Put the originals in one envelope and photocopies in the other. Keep the envelope with originals with you during the storm. Give the sealed envelope with the copies to a trustworthy friend or relative.

## PROTECTING YOUR BELONGINGS

### Home preparation



To reduce damage to your home and property, it is important to protect the areas where wind can enter. According to the National Hurricane Center, you should strengthen the exterior of your house so that wind and debris do not tear large openings in it.

Protect and reinforce five key areas: roof, hurricane straps, windows, doors and garage doors. A good time to do this is when you are making home improvements or building an addition.

Other tips for protecting yourself and your home:

- Make sure your homeowners', windstorm and flood insurance policies are effective.
- Check your battery-powered equipment. A radio may be your only link to the outside world during and after a hurricane.
- Develop an evacuation plan so that everyone in your family will know where to go if they have to leave.
- Create a disaster supply kit.
- Bring in anything from the yard that could become wind-borne and ask neighbors to do the same.
- Tape will not protect your windows. If you don't have impact-resistant windows, buy shutters. Plywood should be a last resort.
- Plywood that is not properly attached to your house can rip off during high winds and become a projectile that can cause serious harm to your and your neighbor's property.
- If you buy shutters, make sure they meet Miami-Dade County wind-resistance standards; Broward and Monroe counties use the same code. Standards to look for include the SBCCI Test Standard for Determining Impact Resistance from Windborne Debris (SSTD 12-97) or the ASTM Standard Specification for Performance of Exterior Windows, Glazed Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes (ASTM E 1996-00).
- When shopping for shutters, ask about the weight gauge or thickness. The greater the thickness (for aluminum), the stronger the shutter. However, don't buy shutters that are too heavy to be installed efficiently before a storm.
- Reinforce the garage door and tracks with center supports.
- Consider buying shutters for the doors. Be sure to shutter any door containing a substantial amount of glass, and be prepared to wedge sliding glass doors and windows. In addition, pick one door such as a side door to the garage as an entry and exit point for the house. Ideally, that would be a steel door. If you have large attic wall vents, put shutters over them, and don't forget the skylights.
- Bring inside objects that can blow away, such as your mailbox, garbage cans and lawn furniture. What you can't move, anchor. If you have window unit air conditioners, secure them tightly.



- Remove your TV antenna, but be careful not to touch electrical wires. Unplug your TV before taking down your antenna.
- Take "before" pictures of your home and store them in a secure place or online.
- Cover valuable indoor furniture with plastic. A can of roofing tar and a roll of heavy plastic could be priceless after a storm.
- Choose a safe room, preferably an interior hallway or bedroom with no windows, to ride out the storm. Keep a mattress and a functional fire extinguisher nearby.
- Pack your valuables in waterproof containers. Valuables include jewelry, titles, deeds, insurance papers, licenses, stocks, bonds, etc.
- Refill prescription drugs. Obtain an extra supply of special medication.
- Turn your refrigerator and freezer to the coldest setting.
- Wedge sliding glass doors to prevent them from lifting from their tracks.
- If you leave home, shut off gas and electricity at the main power source. Shut off water lines to your home.
- Avoid using electric appliances during the storm.
- If your evacuation route is impassible and you become trapped on low ground, seek refuge in a third- or fourth-floor hallway of a high-rise building.

*SOURCES: American Red Cross, National Hurricane Center, Herald research.*

### **Getting your yard ready**

When gardening in a hurricane-prone area, less may be more -- more likely to survive. We're talking trees here. Without your even noticing, your trees have become more than they were last year. A warm winter and a decent amount of rain meant the landscape plants just kept growing. Some trees now are quite thick, casting dense shade. Should these be thinned?

Thinning the outer canopy will allow light and air to circulate into the tree. The University of Florida's pruning guru, Ed Gilman, says the interior structure of the canopy should remain intact after proper thinning.

Allowing air and light to penetrate the crown allows the main branches to increase in size near the trunk and prevents the death of smaller, interior branches, Gilman says. Thinning the outer twigs keeps the canopy from being a sail in the wind.

A new rule of thumb: don't remove more than 15 percent to 20 percent of the canopy of a mature tree. That's down from the older recommendation of 25 percent to 30 percent.

While you're pondering the canopy, look for broken or diseased limbs as well as ramrod straight-up water sprouts. These can be removed. Also, take time to consider the trunk. Look for signs of decay, such as weeping sap or shelf mushrooms, which may indicate disease. An arborist can evaluate the situation.

### **OLDER TREES**

Experts suggest knowing the life span of your trees because specimens nearing the normal end of their lives may be more vulnerable to wind damage. Old trees may be hollow or full of decay, so check them carefully. What you don't want to do now is overprune your palms because it weakens them.

Canary Island date palms are often shorn of so many fronds they look like pineapples with a few feathers stuck on top. This is severe overpruning.

Palm crowns often have fronds that droop to the horizon or below. You can safely remove those that hang below the horizontal ones, but not above. Older fronds really shouldn't be removed until the stems have turned brown. There are exceptions, of course, such as when they block the walkway or drive. But old fronds contain potassium that can be redirected into developing fronds if left on the plant.

What you want to do is remove coconuts from those palms well before any approaching storm, as these can become lethal.

Make yourself a note: pick up supplies to have on hand should a storm knock things around. Banrot, Aliette and Subdue are valuable fungicides. Kocide mixed with Manzate or Dithane M45 (1 tablespoon each per gallon of water) can be used as a drench for palm crowns.

Have stakes and rope on hand should trees be toppled. A chain saw is valuable for tree limbs that have to be cut and dragged to the trash pile (don't forget the oil and gasoline.)

Orchid growers -- and there are plenty of us -- should also prepare for hurricanes because orchid collections can be quite valuable.

If you have too many orchids growing in baskets and pots to bring inside, water them well before a storm and put them on the ground. I put orchid pots under the benches on the floor of the orchid houses. Those with sentimental value (read, award-winning) come inside.

### **EXTRA SHADE CLOTH**

Remove shade cloth from the shade structure. It can turn into a sail and may also take the house with it. Have the fungicides mentioned above, and extra shade cloth for covering your plants after a storm.

If you are close enough to the coast that a storm surge inundates your yard with saltwater, hope for an intact water supply that will let you quickly hose off valuable non-salt tolerant plants. Even the salt-tolerant ones are unlikely to be that salt tolerant.

If your area is flood-prone, Subdue used as a drench will help against root fungal diseases.

In hurricanes past, I have found the hard way that thick clumps of bougainvilleas growing on a chain-link fence can take down the fence. We are near the end of the bougainvillea flowering season, so if yours are growing on a fence as mine are, cut them back hard once the flowers thin out and keep the shrubs under control.

This year, yards are looking quite lovely after two years of no storms. To keep them as durable as possible, make sure the plants are healthy (not yellow from lack of nutrients) and the trees storm-ready.

*Georgia Tasker is The Herald's garden writer.*

### **Pool and patio enclosures**

A hurricane approaches and what's the first thing to go? A screened pool or patio enclosure. But there are precautions a homeowner can take.

"Armor Screening is the best product to come out," says Mohammad Ali, of Hurricane Window Shutters and Screen of Miami. "It's a fiberglass material, something like a net to catch any debris. You install it (around the screen) before a storm."

The product "uses a unique interwoven design, which provides an excellent barrier to high winds and driving rain, yet you can see right through it," says the company's website ([www.armorewscreen.com](http://www.armorewscreen.com)).

The Miami-Dade certified product replaces the "dark cave effect" of traditional shutters with natural light. Although prices vary according to the size and configuration of the screen enclosure, Armor Screen costs roughly \$20 a square foot, Ali says.

The Armor Screen material is flexible, much like that used in trampolines. The clear shutters are made from the same strong polymer resin used in the canopies of fighter jets and NASCAR race cars.

The fabric can be customized to protect awkward spaces, such as condo balconies, recessed front entrances or patio areas, says Armor Screen's sales manager Eric Gower. "It's so effective that screened areas can be used safely and comfortably during the storm," he says. "The screen also allows plenty of light to filter in, reducing the claustrophobic atmosphere of a darkened, shuttered home."

The initial installation, which includes anchor bolts, must be done professionally, but the screening is lightweight and can be put up and taken down by one person afterward, Gower explains. "If storage is a problem, it can be installed so that it opens and closes like a shower curtain."

### REMOVABLE SCREENS

Some homeowners opt for removable screens to relieve pressure within a pool enclosure during high winds. It's a frame within a frame that can be taken out in a minute. It may be cheaper to replace screens than lose the cage (the pool/patio enclosure frame.) But since South Florida hasn't had a hurricane since Wilma in 2005, this procedure hasn't been tested.

Removing a screen panel on each side of the enclosure "helps relieve pressure from the wind," says Howard Ellis, owner of Ellis Screen Enterprises of Cutler Ridge. "Unless it's Hurricane Andrew, and then it doesn't matter.

Added Keith Ellis (no relation of Howard Ellis), owner of Storm Screen in Miami, "There's no need to cut a screen; the wind will do it for you. What you need to do before a storm is, make sure the diagonal framing is strong, the bolts in the floor are secure."

Taller screen enclosures are the most vulnerable in high winds. Tougher screen requirements were added to the Florida Building Code in 2004. New rules call for more anchors, a smaller span for beams and columns, and more screws connecting the wall column to the roof beams.

### LOCAL CODES

Homeowners are advised to check with state and local codes and approvals before buying any new product. Another problem for homeowners is that most carriers do not provide hurricane coverage for screen enclosures, whether attached or unattached to the dwelling. Some companies require a separate policy for screen enclosures.

In Miami-Dade, new screen structures must withstand a wind velocity of 140 mph. In Broward the standard is 140; in Monroe 150 is the standard, also for new screen enclosures.

*Miami Herald staff contributed to this report.*

### PREVENTION

Here are some preventive steps you can take to help save your screened enclosure:

- Make sure it's anchored into concrete footing, not just dirt. Give the structure a shake and see if it's sturdily attached.
- Make sure restraining cables are tight and in good condition. Make sure bottom fasteners or bolts have not rusted away.
- Trim trees, bring in anything that could turn into a missile. "It doesn't take much to puncture a screen," says Don Harrison, spokesman for Home Depot.

### Protecting your pool

Storm damage to a swimming pool can be expensive to repair. So, take the proper precautions before a storm hits:

- Water in the pool will act as a shield for the finish of the pool, protecting it from sand and flying debris.
- Some experts say it's not necessary to lower the pool's water level. But if you fear flooding, lower the water to about three inches below the skimmer, but no more than 1 or 2 feet below the edge. Close the skimmer valve to prevent damage to the pump and piping.
- Add extra chlorine to prevent contamination. Pool service companies recommend powdered shock or liquid chlorine. The pool also provides a handy source of water for washing or flushing toilets if your house's main water supply fails.
- Do not allow anyone to enter the pool after chlorine is added.
- Turn off the electricity to the pool equipment at the circuit breaker, not at the pump.
- Disconnect pool lights and chlorinators.
- Once the pump is cool, you can wrap it in a plastic bag for extra protection.
- Wrap an exposed filter with waterproof covering and tie it securely.

- Remove the child safety fence. Do not allow children near the pool after the fence is removed. You must reinstall it immediately after the storm.
- Bring patio furniture indoors; don't throw it in the pool. Furniture may chip and damage the pool finish.
- Remove canvas patio awnings and bring them indoors.

### **Pet care**

Think ahead about the best way to protect your pet during a storm. You don't want to be scrambling to find a shelter or stocking up on pet food after a hurricane warning has been issued.

If you live in an evacuation zone, then you will be required to leave -- no matter how many pets you own. Abandon any thoughts about letting your pet ride out the storm without you.

Red Cross emergency shelters don't accept animals, except for service animals such as a seeing eye dog. Only two shelters in Miami-Dade County and one in Broward County will accept pets and their owners, but space is limited and you must register far in advance.

In southwestern Miami-Dade, the Sunshine Pavillion on the grounds of the Miami-Dade County Youth Fair & Exposition, 10901 SW 24th St., can hold 150 pets and 350 people. Animals and people will be housed on separate sides of the 49,000-square-foot area.

In northern Miami-Dade, registered residents and their pets can evacuate to Dr. Michael M. Krop Senior High School, 1410 NE 215th St., Miami.

For registration in Miami-Dade, call 311 or go to [miamidade.gov/animals/disaster\\_preparedness.asp](http://miamidade.gov/animals/disaster_preparedness.asp) for more information.

In Broward, the pet-friendly shelter is available only to pet owners living in evacuation zones and mobile homes. Pet owners, who will be housed separately from their pets, must register in advance. Registered participants will be notified of the shelter's location.

Broward residents in an evacuation zone can register in person at the Humane Society of Broward County, 2070 Griffin Rd., Fort Lauderdale, from 9 a.m. to 5 p.m. Monday to Friday. Call 954-989-3977 for more information.

### **SUPPLIES**

- Stockpile two weeks' worth of food, water and medications.
- Gather vaccination histories in case officials call for immunization information.
- Aquarium owners may want a battery-operated aerator or a small generator to run the air pump if power fails.

If you plan to shelter at home, here are tips for pet safety during a storm.

### **IDENTIFICATION**

- All pets should have a secure collar with a tag that includes your name and emergency contact numbers. One number needs to be an out-of-town contact. Even tagged pets were euthanized after Katrina when owners could not be found with local tag information.
- Microchips are essential. This backup method helps ensure that pets with lost collars get back to you.
- Carry photos of your pets in case they are lost.
- After the storm, don't let your pets roam free. They could become lost or consume contaminated food or water.

### **TRAVEL**

- If you plan to evacuate, make plans to take your pet.
- Keep handy a list of animal friendly hotels in the area you choose to evacuate to. For links to pet friendly hotels, visit [broward.org/hurricane/hm\\_animals.htm](http://broward.org/hurricane/hm_animals.htm).
- If a relative's home is your destination, let them know your pets will be coming too.
- Do you have space in your car to carry your family and pets? Do you need two cars? A friend?

- Consider boarding your pet at your destination.

### **LOCAL HOUSING**

- Your vet and local kennels are seldom a safe option. After all, they're in the path, too. Unless they have hurricane shelter infrastructure and storm staffing, you're better off keeping pets with you.
- Even at home, you'll need a crate for a dog. This ensures that your indoors remain controlled and your pets protected should Andrew-like conditions ensue.
- Crates are usually required before hotels and shelters will accept your pets -- one crate per pet.
- Acclimate your pet to its crate before a storm.
- If you have to evacuate and must leave your animals at home, put them in the most secure room, along with litter boxes, dry food and plenty of water. Separate the dogs from the cats. But remember: leaving your pets alone is an absolute last resort.

*Sources: Miami-Dade County Animal Services, Broward County Emergency Management Agency, Herald research*

### **PET-FRIENDLY ACCOMMODATIONS - MIAMI-DADE**

- Hampton Inn, 124 Palm Dr., Florida City; 305-247-8833
- Holiday Inn Express, 5125 NW 36th St., Miami Springs; 305-887-2153
- Hotel Sofitel, 5800 Blue Lagoon Dr., Miami; 305-264-4888
- Quality Inn South, 14501 S. Dixie Highway, Miami; 305-251-2000
- Sheraton Miami Mart Hotel, 711 NW 72nd Ave., Miami; 305-261-3800
- Candlewood Suites Airport West, 8855 NW 27th St., Miami; 305-591-9099
- Staybridge Suites, 3265 NW 87th Ave., Miami; 305-500-9100
- Omni Colonnade, 180 Aragon Ave., Coral Gables; 305-441-2600
- Mayfair Hotel & Spa, 3000 Florida Ave., Coconut Grove; 305-441-0000
- Residence Inn by Marriott, 1212 NW 82nd Ave., Miami; 305-591-2211

### **PET-FRIENDLY ACCOMMODATIONS - BROWARD**

- Holiday Inn Express, 1701 University Dr., Plantation; 954-472-5600
- Travelers Inn, 1401 Federal Hwy., Deerfield Beach; 954-421-5000
- Elysium Resort, 550 Birch Rd., Fort Lauderdale; 954-564-3151
- Westin Hotel Cypress Creek, 400 Corporate Dr.; 954-772-1331
- Wellesley Inn Fort Lauderdale-Tamarac, 5070 N. State Road 7, Fort Lauderdale; 954-484-6909.
- Comfort Inn Lauderdale Hollywood, 2520 Stirling Rd.; 954-922-1600
- Sheraton Design Center Hotel, 1825 Griffin Rd., Dania Beach; 954-920-3500
- Extended Stay America, 7755 SW Sixth St., Plantation; 954-382-8888
- Las Palmas Hotel, 3003 N. University Dr., Sunrise; 954-748-7000

## **Automobile safety**

### **BEFORE THE STORM**

Keep automobile titles and other documents sealed in plastic bags in a safe place where they won't get lost. Keep your car or truck in a garage or carport, if available. Otherwise, park close to the building on the side away from the wind. Vans and semi-trailers can be blown over if they are exposed to the full force of storm winds.

Fill the fuel tank and keep it topped off. Fuel might not be available right after a storm, though most filling stations are now required to have back-up generators to power their pumps.

Ensure the battery is fully charged, since dampness from the storm might make it hard to start the car. In an extreme emergency, a car radio may be your only source of information.

If the vehicle is in a beach area, tape old blankets or sheets over the windows to prevent blowing sand from pitting the glass. Fully tape to ensure wind does not get under the covering, and remove tape immediately after the storm to avoid leaving marks on the vehicle.

Do not park near a tree that might fall on or break branches over your vehicle. Do not park near power lines that might fall on your vehicle.

Do not park between two buildings located very close to each other as wind may funnel through these areas.

### **DURING THE STORM**

Do not drive during the storm as your car may become stuck or blocked by debris, or stalled by flooding of roads.

### **AFTER THE STORM**

Do not go sightseeing in your vehicle after the storm. This may impede recovery efforts.

Do not drive through flooded streets.

*Source: Broward County Emergency Management Agency, American Automobile Association.*

### **Caring for your boat**

The annual hurricane prep seminar at Black Point Marina in Cutler Ridge is full of advice for boat owners seeking to protect their boats from the next big storm. But it's the photos taken after Katrina, Wilma, Andrew and other hurricanes that make the biggest impression on the crowd that gathers every May at the marina's Ocean Grill.

Boats piled on top of each other like Tinker Toys. Boats thrown into parking lots. Boats skewered on pilings. The underlying message? Be prepared. Have a plan.

"All boat owners should really have a plan in place, whether they keep their boat at a marina or not," says Kathy Haley, manager of marina operations for Miami-Dade County Parks. "Our concern is making sure that everything is done in time."

Storing a boat out of the water is the optimal move, according to boating experts at BoatUS, a national boating association based in Alexandria, Va. But many boaters in South Florida don't have that option, Haley points out.

Regardless of where a boat is secured before a hurricane, there are key moves every owner needs to make. Among the basics: Remove anything that could flap or become airborne, including T-tops, bimini tops, awnings, dodgers, cushions, dinghies and sails. Extra lines are a must. Chafe protection wrapped around the lines -- whether it's new leather chafe guards or old, rubber hoses -- is an added benefit. Charging batteries and making sure the boat is fueled also should be done ahead of time. (Remove batteries from sailboats.) Valuables also need to be removed and the boat should be left unlocked. If authorities need to search vessels for victims, they'll break down all locked doors.

### **OUT OF WATER**

- Portable boats more than 20 feet are best stored indoors since the freeboard may act as a sail and move the boat and trailer, possibly tipping the boat over, advises Broward County's Hurricane Preparedness Plan. The boat should be placed in a garage or carport with the car left outside.
- If the boat is left outside, "pull the plug so the boat doesn't fill up with water," says Haley with Miami-Dade Parks. "If you leave the boat on a trailer, deflate the tires." (This causes water to drain out of the back of the boat.)
- If the boat's on a lift, tether the bow and stern to the lift itself so that high water won't float it off, says MarineMax, the nation's largest recreational boat and yacht retailer.
- To keep a boat from being blown over, strap it to the ground, according to BoatUS. A strap holds the boat more securely against the jack stands, steadying the boat so that there is less movement and less chance of the jack stands working loose. Some use helical anchors screwed into the soil, a technique similar to that used by mobile homes; others have resorted to eyes embedded in concrete pavement or concrete runners set into dirt, sand or gravel.

### **STAYING IN WATER**

When a boat has to be left in the water, deciding where to put it is the single most important decision to make before a storm," says BoatUS. One of the most secure places is a residential canal or narrow waterway. A narrow body of water won't have large, breaking waves, and a boat secured in the middle of



the waterway with long lines ashore can rise and fall with the surge. (Coordinate this with boaters using the area so that you don't block other boats from seeking shelter.)

Broward County's Hurricane Preparedness Plan suggests tying sailboats out from the docking area by using at least two anchors (one forward and one aft) and lines into deeper water, allowing sufficient slack for as much as four to five feet of tide.

Seaworthy magazine notes that a seawall or sandy spit that normally protects a harbor may not offer any protection in a hurricane. And although some boaters head to the Miami River, it officially cannot be used as a safe harbor unless the boater has contracted for marina space, warns Miami-Dade County's Office of Emergency Management.

### **ADDED SECURITY**

There are never any guarantees in a hurricane, no matter where you leave your boat, but there are some steps with obvious advantages:

- If you secure lines to trees, avoid tying up to non-native exotics, such as Australian pines and certain palms, which are vulnerable to blowing over. Pilings, most indigenous trees (mangroves are good) and earth augers screwed into the ground are the best alternatives, according to BoatUS.
- Duct-tape vertical windows to prevent water from getting in. If possible, duct-tape engine room vents to prevent rain intrusion, MarineMax says.
- In a storm, a boat will rise and fall with water levels, so position the fenders on pilings or docks that pose a constant threat to the hull, advises Miami-Dade County's Office of Emergency Management.
- When docked, double- or triple-line boats, allow them to move with the water, but keep them tight enough to prevent the vessel from slamming against docks and poles -- the cause of most boat damage, MarineMax warns.

### **LINES COUNT**

Using more and larger lines significantly improves a boat's chances of surviving a storm, reports BoatUS. Eight lines should be the minimum. Although the size of cleats determines the maximum size of the rope, a three-quarter-inch line will outlast a half-inch line and two three-quarter-inch lines will outlast a single three-quarter-inch line.

"One of the most obvious mistakes is old lines," says Miami-Dade's Haley. "Make sure your lines are in good condition, not frayed."

Using braid-on-braid lines, which have 50 percent less stretch than three-strand, has helped in previous hurricanes, advises BoatUS. Nylon lines are traditionally stronger, but polyester lines are more resistant to chafe, so using a combination of both can be beneficial. Only two lines should be tied to any one cleat or piling. Multiple, long lines to shore allow the boat to rise and fall with the surge without coming in contact with pilings, piers or seawalls.

### **WHEN TO ACT**

Boaters should start moving or preparing their boats at least 48 hours before a storm. Once evacuations have started off the barrier islands, Intracoastal Waterway bridges in Miami-Dade will be opened only infrequently until lockdown.

In Broward, lockdown will be approximately three hours after an evacuation order is issued or when winds reach 40 miles per hour. These lockdowns can be ordered 24 hours or more before a hurricane hits.

### **SAFE HARBOR**

Helpful websites for boaters looking for hurricane preparedness tips:

- BoatUS, [www.boatUS.com](http://www.boatUS.com), has a Hurricane Preparation Worksheet
- Miami-Dade County, [www.miami-dade.gov/oem/prepare\\_boats.asp](http://www.miami-dade.gov/oem/prepare_boats.asp)
- Broward County, [www.broward.org/hurricane/hm\\_boats.htm](http://www.broward.org/hurricane/hm_boats.htm)
- MarineMax, [www.marinemax.com](http://www.marinemax.com)

## SUPPLIES

### Gadgets to help reduce storm stress

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BY STEVE GREENBERG

Having lived in South Florida for almost 20 years, I can tell you that the one way to reduce your hurricane anxiety is by being prepared. Having just a few products on hand can reduce stress before the storm and make the aftermath so much easier.

I spend much of my time traveling around the country checking out the latest innovative products. When I find a product that seems like it might help us weather a storm here in hurricane country, I check it out. Here are a 10 you might want to add to your collection of hurricane supplies.

### COOKING LITE

Most of us depend on electricity to cook our meals -- a challenge after a hurricane. One cooking solution is the Sun Oven.

It can bake, boil or steam at temperatures of 360 to 400 degrees Fahrenheit just using sun power. The manufacturer claims that food prepared in the Sun Oven stays moister and tastes better.

When closed the Sun Oven is about the size of a small suitcase. It measures 19 inches by 19 inches and weighs just 21 pounds. It's easy to set up. Just point it toward the sun and position the reflectors.

A Sun Oven including a cooking pot and shipping is less than \$300. To order: 800-408-7919 or [www.sunoven.com](http://www.sunoven.com).

### CAN YOU HEAR ME?

After a storm, phone lines can be down, but sometimes cell towers remain operational. Energi To Go lets you power up your cell phone with two AA Lithium batteries. In most cases, even if you have a completely discharged cell phone battery, you can start making calls within 30 minutes after plugging your phone into Energi To Go.

Various models of Energi To Go work for about 80 percent of cell phones. Sold in most big box retail stores, Energi To Go costs about \$20 and includes the correct tip for a specific phone type and 2 AA Lithium batteries.

### LOOK, NO HANDS

Too many jobs require two hands, a problem if you're holding a flashlight in one of them. Why not use your head? That's the bright idea behind Coleman's Exponent Mini-Headlamp.

The light, about the size of a watch face, is strapped to your forehead. When you turn your head to see something, the headlamp is there to light it up. It weighs only 1.4 ounces, and with lithium battery power and LED lights, it is very bright. It's weather-resistant and can run about seven hours on low and two hours on high. The headlamp costs about \$40 and is available at [www.coleman.com](http://www.coleman.com).

### LIGHTING A ROOM

When your power is out for hours, you need more than a flashlight. A battery-powered lantern can light up an entire room. Energizer's Weather Ready Multi-Function Lantern has 3 LED lights, illuminating a room for 500 hours on one set of batteries. The lantern has an amber LED nightlight and comes with 3 D batteries and a detachable LED pocket light. Energizer's Weather Ready Multi-Function Lantern, about \$20, at Wal-Mart and other big box retailers.

### A LITTLE CRANKY?

A little muscle can go a long way, especially when it comes to powering a crank device. The Safety Cross PSD-TOOL (Personal Safety Device model 563710) can multi-task. It's a flashlight-siren-radio, all powered with a crank.

About one minute of cranking will give you about one hour of flash- light power. You can also use the crank to power up your cell phone. And if that's not enough, you've got six tools hidden inside this flashlight. Just remove the crank from the PSD- TOOL and then use the magnetic 6-bit tool kit inside the flashlight to make several handy screw- drivers. PSD-TOOL, about \$40, at Wal-Mart, Sam's Club, Target and [www.life-gear-company.com](http://www.life-gear-company.com).

## THE ESSENTIALS

There are some basics we all need to survive -- water, food and warmth. Life+Gear has put the essentials -- a three-day supply of water, a three- day supply of food and a thermal blanket -- into a convenient kit. The food and water have a shelf life of five years and the blanket can capture 80 percent of your body heat. The Life+Gear Essentials Kit, about \$25, at [www.life-gearcompany.com](http://www.life-gearcompany.com).

## FIRST AID

A first aid kit is essential for weathering a storm.

The KytoStat Bandage would be a good addition. It's made from the same blood-stopping technology the U.S. Army uses to save lives on the battle- fields of Afghanistan and Iraq. When the KytoStat Bandage is in direct con- tact with blood and pres- sure is applied, it can stop stubborn bleeding as well as seal and protect the wound. KytoStat Bandage, \$6 for one or \$15 per three- pack unit, at [www.drug-store.com](http://www.drug-store.com) and some Albertsons supermarkets.

## BACK IT UP

We all recognize how a hurricane can destroy our possessions, but what about our "virtual" possessions? Think about all of the information on your computer -- your photos, financial records, documents, music. It could all disappear if anything dam- aged your computer's hard drive. That's why it is so important to back up. Two of the many available systems caught my eye.

ClickFree Automatic Backup is about as easy as it gets. No software to load, just plug it into your computer's USB port and it does the rest. No buttons to push, nothing to click -- guess that's why its called Clickfree. ClickFree Automatic Backup, about \$170, at BestBuy and online at [www.goclickfree.com](http://www.goclickfree.com).

Another cool external hard drive is SimpleTech's Signature Mini-Drive. It comes in seven high style colors and was designed by the same folks who design Ferraris. Besides the looks, this hard drive offers two gigabytes of free storage space on the Web. So even if your Mini- Drive is lost, your information is safe on the Web. And for just \$5 a month this same company will give you unlimited storage on the Web. SimpleTech drives, about \$120, at BestBuy, Circuit City, Costco and other big-box stores.

## COOKING WITH GAS

No power means no electric stove. Before you start rubbing two sticks together think propane. Campers know that pro- pane burners can be the start of a beautiful meal. Among the various pro- pane stoves from Coleman is a single burner under \$35 and a double burner for under \$50. Both are easy to set up and use. Just make sure you store some propane as part of your supplies. Coleman burners, from \$35, at big-box retailers.

## PROPANE REFRIGERATOR

Most of us understand that when we lose power, the food in our refrigerator is going to spoil. It's just a cold fact. But a cool solution is a propane refrigerator. It looks like a traditional fridge, but it's powered by propane.

A little more than one pound of propane will run the refrigerator-freezer for about 24-hours. A typical propane tank that you might use for a barbecue holds about five gallons of propane. Each gallon is equal to 4.4-pounds of propane. So that means a typical propane tank will keep you food chilled for at least 20-days. I'm told propane refrigerators are exceptionally durable because they work without any moving parts, which means no mechanical wear and tear. No compressor motor also means no noise and vibration, just peace, quiet and cold. Maybe I should get rid of my electric refrigerator?

The price of a propane refrigerator is less than \$1,500, including shipping. You can find out more at: [www.thenaturalhome.com](http://www.thenaturalhome.com), 800-563-9720.

*Steve Greenberg appears on television around the country demonstrating new products. His new book, GADGET NATION: A Journey Through The Eccentric World of Invention, is available online ([www.gadget-nation.net](http://www.gadget-nation.net)) and at Barnes & Noble bookstores.*

## Stocking your hurricane pantry

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For the first day or two after Hurricane Andrew (Aug. 24, 1992), residents of our South Miami-Dade cul-de-sac ate together at the home of the one family who had gas appliances. Refrigerators and freezers were emptied of meat and other perishables, and grills and the gas range were fired up. It was hardly festive, but it was friendly.

After the potlucks were over, however, it was time to raid the pantry. And any hurricane survivor can tell you that while you may feel like eating, you sure don't feel like cooking -- even if you have a grill, camp stove or a gas range.

Fortunately, a new generation of shelf-stable products in pouches adds some variety to the canned staples you probably have already on your "storm shelf."

Here are a few suggestions for ingredients that will help you assemble nutritious no-cook meals.

Remember that, without refrigeration available, you only want to prepare as much as you're going to eat at one time.

**Condiments** are key to punching up flavor of canned food served at room temperature. Olive oil and a wine vinegar, plus some spices or a touch of mustard if you like, make an easy vinaigrette to add to many of the meals below. Bottled lemon and lime juice is good for this purpose, too.

Grated Parmesan cheese in a familiar green can is meant to be stored at room temperature until opening; it's another great addition to a post-hurricane meal.

Being able to snip some fresh parsley, basil or cilantro to toss into these dishes will make a huge difference, so you might want to pick up a few pots and grow them on a windowsill or patio.

If you can't do without mayo, buy a box of restaurant-style packets at a warehouse store; you could split the purchase with a friend.

**Canned beans** can't be beat for non-perishable protein. Add a can of corn (Mexican-style if you like) to a can of black beans; drizzle a dressing made of olive oil plus lime juice and a touch of cumin over the combination. If you like cilantro and have some growing in your garden, toss it in.

Canned mango might seem an odd "staple" for the storm pantry, but you can use it (or fresh ones from your yard) to make a variation of the corn and black-bean salad above; use regular corn and skip the cumin and cilantro. (Thanks to Linda Larsen, [about.com](http://about.com) columnist, for the recipe tip.)

For an Italian-style combo, combine white beans, tuna or chicken, and olives, plus sun-dried tomatoes in oil or a few spoonfuls of bruschetta topping in a jar. Top with Parmesan.

**Tuna or chicken**, canned or in shelf-stable pouches, are another protein source. Flake with a fork and add to a pouch of precooked, shelf-stable rice. No need to heat. Add some herbs (fresh or dried) and a vinaigrette-style dressing and you have a rice salad.

**Summer sausage** (or any other hard sausage you like), chopped and added to Uncle Ben's Cajun Style Ready Rice, makes for a sort-of jambalaya rice salad.

**Dried fruit** of any variety makes a nice add-in, along with a handful of chopped nuts, to chopped chicken. Moisten with a few packets of mayonnaise.

**Canned fruit** in its own juice is really refreshing when there's no A/C, particularly if you thought to put it in the refrigerator or cooler to chill before the power went out.

**Cereal and milk:** For a lot of people we know, it's a guilty pleasure for dinner. But forgo the kid stuff and pick a box with good amounts of fiber, protein and other nutrients. Shelf-stable milk in boxes also will taste better if you have time and space to chill them just before the storm hits.

**Peanut butter** (or other nut butters) and crackers: We feel silly mentioning peanut butter and crackers, but it's the quickest "sandwich" there is, and without A/C in the house, bread is going to get moldy quicker than you can say FPL.

**Energy bars:** These are portable and can help keep you going. Nutritionists recommend looking for about 10 g of protein and at least 3 g of fiber; try to avoid saturated fats.

**Produce:** If you can keep apples on hand during storm season, they're one fruit that keeps for a long time without refrigeration. You'll enjoy the crunch after a few days of fruit swimming in its own juices.

If South Florida is without power for an extended period this hurricane season, you might actually enjoy being able to cook again when the power comes back on. Or, you might decide that these easy meal assemblies are a good summer survival plan even without a storm.

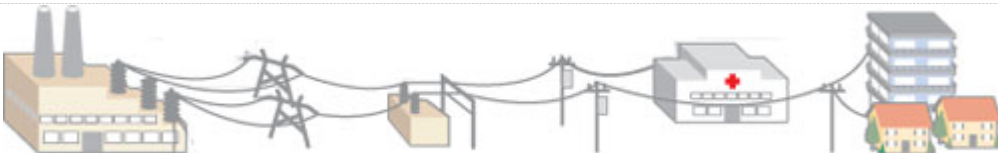
*Gigi Lehman is The Miami Herald's Supermarket Sleuth columnist.*

## **Water**

- Store a two-week supply -- at least one gallon per person per day.
- After a storm, don't drink tap water until you know it is safe. If a "Boil Water Order" is issued, the media will announce it.
- Store water only in clean containers and only for three months. Bottled water generally should be stored only for six months.
- You can store water in your bathtub for flushing toilets and washing -- not drinking. Sponge the tub with a solution of liquid bleach and water, caulk the drain to make it watertight, and fill. Cover it if you can. Use four drops of unscented bleach per gallon of water.
- Freeze as much water as you can.
- Before a storm, shut off your water heater from its water source so it will not get contaminated.
- You can bottle water in food-grade plastic containers. Wait until a hurricane warning is announced to do it.
- Boiling water at a rolling boil for one minute will kill infectious organisms. Let it cool, and store in clean containers. If water is cloudy, filter it through clean cloths or allow it to settle, and draw off the clear water for boiling.
- If you can't boil water, then disinfect it using household bleach. Bleach will kill some, but not all, types of disease-causing organisms. Add 1/8 teaspoon (or eight drops) of regular, unscented household bleach per gallon of water, stir it well and let it stand for 30 minutes before using.

## **POWER AND EMERGENCY RESCUE**

### **When the grid goes, it all goes**



### **Why you don't have electricity**

A hurricane's winds can tear down transmission lines and power poles.

Flying debris knocks out many FPL stations that supply whole neighborhoods.

Repair crews focus on essential customers such as hospitals, police departments and fire departments first.

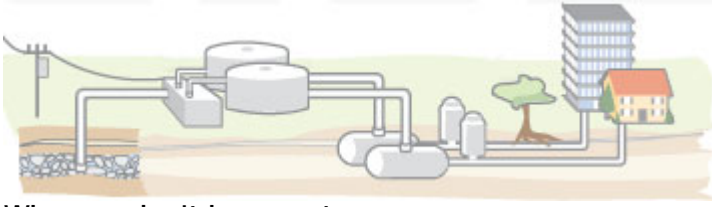
### Why you don't have phone service

Telephone relay stations need electricity to provide local service.

With electricity gone, the phone company uses backup batteries and generators until they deplete.

Also, they can switch stations to provide service to cellphone transmission towers.

Without electricity people can't recharge their cell phones or run their cordless home phones, so it is advised to have one phone attached to the wall with a cord for use while the phone lines are still running on generators even if electricity is out.



### Why you don't have water

Many pumping stations and treatment plants get damaged in strong storms, leaving them at less-than-normal capacity.

Broken or sputtering power supplies slow pump and treatment systems at the source.

Uprooted trees can also pull underground water mains out, destroying them and preventing water flow.

Also, broken or sputtering power supplies mean apartment towers can't pump water to upper floors.

### Driving around town without traffic signals [\(return to top\)](#)



1. If traffic signals are out of order, stop as you would for a four-way stop sign.



2. You must yield the right of way to all other traffic and pedestrians. Move forward only when the road is clear.



3. At a four-way stop, the first vehicle (1) to reach the intersection and stop should move forward first.



4. If two vehicles reach the intersection at the same time, the driver on the left(2) should yield to the driver on the right.

### How FPL restores power [\(return to top\)](#)

Florida Power & Light's strategy to restore service to customers without power is based on safety and need, the company says.

1. Work crews begin in areas with winds below 35 mph. After the hurricane passes, outside workers will be brought in to assist FPL field workers with the repair effort if the damage is bad enough.
2. FPL's first priority is to have all the power plants operating.
3. Next, repair crews concentrate on lines that serve essential customers such as hospitals and police and fire departments.



4. Crews then focus on what repairs can restore power to the greatest number of customers. A major substation or primary distribution line serving 2,000 or 3,000 customers takes priority over a transformer box serving 50 people.
5. Repairs aren't based on geography. Crews are not necessarily rushed to the areas of greatest devastation; they are routed to the places where they can help the most customers.

## **FEMA's sequence of delivering aid**

### **EMERGENCY PHASE**

#### **Local government voluntary agencies**

Supply immediate food, shelter, clothing and medical assistance

### **RELIEF PHASE**

#### **Personal Insurance**

**FEMA Housing Assistance:** Must call 1-800-621-3362 to register.

1. **Temporary housing:** Lodging, Rental, MH / TT
2. **Repairs:** Up to \$5,200
3. **Replacement:** Up to \$10,500
4. **Permanent housing construction:** Financial or direct

*This segment is for SBA dependent needs. Skip below for Non-SBA dependent.*

**SBA Disaster Loan:** Applicants must complete the SBA loan application. If the loan is denied, the applicant becomes eligible for further assistance.

- Homeowners: Up to \$200,000
- Personal property: Up to \$40,000 (Renters and owners)
- Business: Up to \$1,500,000

#### **SBA loan denial or referral**

#### **Other Needs Assistance**

##### ***SBA dependent***

Combines assistance from Housing and Other Needs:

- Transportation (vehicle)
- Personal property
- Moving and storage

*Start reading here for non-SBA dependent assistance*

#### **Other Needs Assistance**

##### ***Non-SBA dependent***

Combines assistance from Housing and Other Needs:

- Funeral
- Miscellaneous expenses
- Medical, dental
- Transportation (non-vehicle)

### **LONG TERM RECOVERY**

#### **Recovery support groups:**

- Voluntary agencies
- Interfaith organizations
- Long term recovery committees