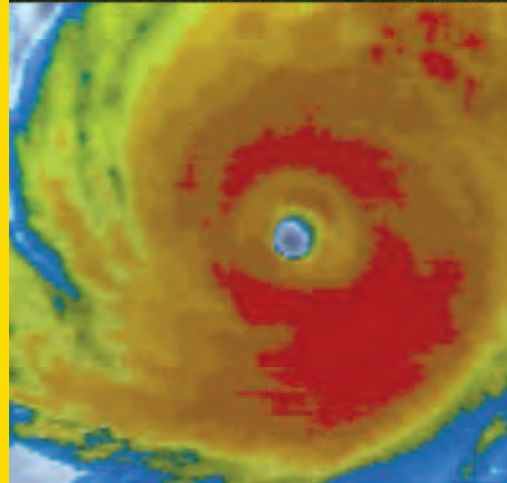


# DISASTER

## PLANNING GUIDE

What to do before, during and after any crisis



**Consumer Reports®**

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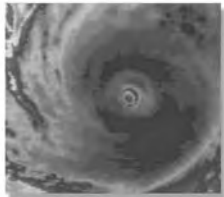
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From the Editors of

**Consumer Reports®**

# DISASTER PLANNING GUIDE



▶ **Each year** hurricanes, tornadoes, floods, wildfires, mudslides and earthquakes devastate families, homes and savings accounts.

With government aid and financial relief often slow, you are best served by lowering risks before, during and after a crisis.

This CONSUMER REPORTS guide tells you exactly how to safeguard your family, minimize damage and quickly recoup losses.

Essential, life-saving tips—all in one, easy-to-read guide.

From the Editors of

**Consumer Reports**®

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- Rooms in your house that are safest
- Why you need three emergency dash kits
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- How to keep mold from taking hold
- Steps for claiming disaster tax breaks
- Mistakes homeowners make when scammers ring the bell
- How to find an honest contractor
- Where to turn for federal aid
- And more*

## 1 Is your home in harm's way?

Whether you own your home or rent—or you're about to buy—find out the risks your property faces:

- ▶ **HURRICANES.** See how often your area has been hit at [www.csc.noaa.gov/hurricanes](http://www.csc.noaa.gov/hurricanes) (click on "query storm tracks" and type in your ZIP code).
- ▶ **TORNADOES.** NOAA.gov provides state-by-state data as well as maps showing annual fatality locations ([www.spc.ncep.noaa.gov/climo/historical.html](http://www.spc.ncep.noaa.gov/climo/historical.html)).
- ▶ **EARTHQUAKES.** Check your state's earthquake risk at the U.S. Geological Survey's web site ([www.earthquake.usgs.gov/regional/states](http://www.earthquake.usgs.gov/regional/states)).
- ▶ **FLOODS.** To determine if you live in a flood zone, go to [www.floodsmart.gov](http://www.floodsmart.gov), where you can enter your address and ZIP code. Also consult the flood maps at your local municipality or town hall.
- ▶ **MUDSLIDES.** Watch for changes in the landscape surrounding your home. Dangerous signs include progressively leaning trees and new runoff patterns. Also look for jamming doors and windows in your home, new cracks in stonework, large cracks on driveways and tilting fences and utility poles.
- ▶ **WILDFIRES.** Check the National Fire Maps site ([NIFC.gov/firemaps.html](http://NIFC.gov/firemaps.html)) for real-time information and updates.

## 2 Is your home properly insured?

Studies show that nearly 60% of homes today are underinsured by about 22%, says Jeanne Salvatore of the Insurance Information Institute. Check your policy by asking your insurer these questions:

### Can I rebuild?

Your policy should cover the current cost of rebuilding your home in the event it's destroyed.

### What about my possessions?

Most policies cover damaged or destroyed possessions up to 75% of the coverage on your home. Determine if this amount is sufficient by listing your key possessions and their replacement cost.

### What about living expenses?

Be sure your policy will cover the cost of living expenses if your home is uninhabitable or being fixed due to an insured disaster. The policy should pay hotel bills, restaurant meals, transportation and other living expenses. Ask if there's a time limit. If standard coverage is inadequate, you may be able to increase it for an additional fee.

### Do I have liability protection?

Liability coverage protects you against the cost of lawsuits and damages for bodily injury or property damage that you or family members cause to others. It also pays for damage caused by pets. Most policies provide a minimum of \$100,000, but higher amounts are available for fractional amounts.

## 3 Make a master list of possessions

An insurance claim will often be settled faster if you have a comprehensive list of possessions and proof of ownership. Such a list also will help you verify losses for tax purposes and purchase the right amount of insurance coverage. The Insurance Information Institute recommends these steps:

- ▶ **TAKE INVENTORY.** Go into each room and closet and make a list of your key possessions. Describe each item, noting where and when you bought it, as well as the make and model.
- ▶ **INCLUDE PROOF.** Attach sales receipts, purchase contracts, and appraisals to your inventory list.
- ▶ **SNAP IMAGES.** Use a digital or film camera or camcorder to photograph rooms and important individual items.
- ▶ **DOWNLOAD FREE SOFTWARE.** Inventory software is available from [www.iii.org](http://www.iii.org) or from your insurer. Copy your paper list onto the software.

- ▶ **STORE THE LIST.** Make a copy of your paper inventory and images—or burn a digital version to disc. Keep one copy in a safe-deposit box and another at the house of a friend or family member far from your home.
- ▶ **UPDATE SEASONALLY.** Whenever you make a significant purchase or discard a possession, update your inventory list and set of images.

#### 4 Avoid this big insurance mistake

When calculating how much coverage you need, don't confuse what you paid for your house with the cost to rebuild. The land under your house isn't at risk from theft, windstorm, fire and other disasters.

##### What to do:

Base your coverage needs on how much it will cost to replace your home and possessions today. Don't base coverage on your property's current market value. If you do, you'll pay a higher premium than necessary.

#### 5 Renting? You need coverage, too

Renters insurance protects against damage or loss of possessions when disaster strikes. What a typical policy covers:

- ▶ **YOUR POSSESSIONS.** These are covered against losses from fire or smoke, lightning, vandalism, theft, explosion, windstorm and water damage (not including floods).
- ▶ **INJURIES TO OTHERS AT YOUR HOME.** These include injuries caused by you, family members and pets. Legal defense costs and awarded damages also are covered if you are sued.
- ▶ **LIVING EXPENSES.** This protects you if you are unable to live in your apartment because of a fire or other covered peril. Most policies will reimburse you the difference between your additional living expenses and your normal living expenses but still may set limits as to the amount they will pay.

#### 6 Test your insurer's financial strength

Before buying property coverage from an insurer—either for the first time or because you're switching—take these steps:

##### Check the rating.

See that the insurer has a high financial rating. Get free ratings reports from AM Best by registering at its site ([www.ambest.com/membercenter](http://www.ambest.com/membercenter)), or from Moody's Investor Service ([www.Moodys.com](http://www.Moodys.com)). A higher rating minimizes the risk of being dropped if the insurer has financial problems.

##### Check for complaints.

Check the insurer's complaint ratio posted at most state insurance department web sites and at the national association of insurance commissioners' consumer information source ([www.naic.org/cis](http://www.naic.org/cis)). The lower the ratio, the better an insurer's performance.

#### 7 Know what insurers won't cover

Many property insurance policies are adding "anti-concurrent causation" clauses that spell out situations in which coverage is not in force. What to do:

- Read** over your policy carefully and call your insurer to clarify all exclusions.
- Buy** extra coverage for special conditions that are excluded—especially flood and earthquakes.

#### 8 Fill in your big insurance gaps

Identify insurance-policy shortfalls before disaster strikes. Consider additional coverage to protect:

##### Heirlooms, jewelry and art.

These will require special riders. In some cases, you may not want to pay to insure them, since you may never be able to replace items of nostalgic significance that are lost.

##### Water damage.

Flooding caused by external waters or a backed up sewer generally aren't covered.



**Fallen trees.**

While the damage to your home by wind-blown trees and tree limbs is covered by most policies, replacing trees and other landscaping isn't covered. Neither is the high cost of having large fallen trees sawed and removed from your land or a neighbor's yard. Generally, you are covered for the cost of removing fallen trees only if they hit an insured structure.

**9 Check for hurricane-policy shortfalls**

Watch out for new hurricane-specific deductibles added to policies by insurers. Such deductibles can range as high as 10% of your home's value. Insurers also are placing caps on replacement-cost payments when a home is destroyed. Such policy additions can leave you short of funds for rebuilding, particularly if construction costs surge due to extreme demand. What to do:

- ▶ **Check** your policy or call your insurer to see if these additions have been added to your policy.
- ▶ **Consider** additional coverage, especially if your home is located near a coastline.

**10 Beware of the wind/water trap**

Many homeowners along the Gulf Coast battled with insurance companies long and hard over whether damage to their homes from Hurricane Katrina was caused by wind or water. There is a big, costly difference:

**TRAP I.**

While property insurance policies cover wind damage from hurricanes, they do not cover water damage from storm surges and other types of flooding.

**TRAP II.**

In large-scale disasters where evacuation is necessary, it is difficult to prove to insurers afterward that damage was caused by wind-driven rain rather than rising water.

**SOLUTION.**

If you live near a coastline, river or other large body of water—or your house could be flooded by melting snow, an

overflowing river or rising pond—consider purchasing flood insurance through the National Flood Insurance Program (888-379-9531 or [www.floodsmart.gov](http://www.floodsmart.gov)).

**11 Who needs flood insurance?**

Anyone who must protect against the risk of losing a home and its contents to water damage needs a special flood insurance policy. Most standard property insurance policies do not cover flooding. What to do:

- ▶ **Weigh your risk.** To find out if you live in an area at high risk for flooding, consult the flood maps at your local municipality or town hall. Also check the estimator at the National Flood Insurance Program's site ([www.floodsmart.gov](http://www.floodsmart.gov)) to estimate your flood-insurance premium.
- ▶ **Buy coverage.** Basic flood coverage is provided only by the Federal Flood Insurance Program (888-379-9531 or [www.floodsmart.gov](http://www.floodsmart.gov)) and can be purchased through your homeowner's insurance agent.
- ▶ **Consider adding coverage.** Federal policies provide only limited coverage. If you need more coverage based on the replacement cost of your home and possessions, buy additional coverage from specialized insurers such as Lexington Insurance Company (part of American International Insurance Company) and Lloyd's, or from homeowners insurance companies with arrangements with a specialized insurer.
- ▶ **Act fast.** Don't wait for a flood warning to buy a policy. There is a 30-day waiting period before the coverage takes effect.

**12 Can't find wind coverage in Florida?**

As a result of recent hurricanes and widespread damage, some insurance companies in Florida have stopped covering wind damage in homeowner's policies or have dramatically lowered their coverage.

- ▶ **SOLUTION:** If you own property in Florida but can't find an insurer that will provide wind-damage coverage required by mortgage lenders, Citizens Property Insurance (CPI) policies are available. CPI ([www.citizensfla.com](http://www.citizensfla.com)) is a quasi government agency set up by the Florida legislature in 2002 as an insurer of last resort to provide wind-damage coverage. Policies are sold through Florida insurance agents.

### 13 Protect against disaster-related injuries

To protect yourself and your household income against serious injury caused by disasters, review and update these three key policies:

- ▶ **HEALTHCARE.** To find health coverage if you don't have an employer plan, start by checking policies offered at [www.ehealthinsurance.com](http://www.ehealthinsurance.com) or by asking friends about their coverage. Or hire a licensed health-insurance broker to find a policy for you at the National Association of Health Underwriters Web site ([www.nahu.org](http://www.nahu.org)).
- ▶ **DISABILITY.** A policy should cover 60 percent to 75 percent of your income if injuries keep you from performing your job. If your workplace policy falls short, consider buying supplemental coverage on your own.
- ▶ **LIFE INSURANCE.** To assess your family's current and future financial needs if your or your spouse's income were no longer available due to death, view the worksheets at [www.insweb.com](http://www.insweb.com) (click on "learning center").

### 14 High flood risk? Insure against mold

Damage from mold is excluded from most standard homeowners' policies, and cleanup is covered only if the contamination was the result of a covered peril, such as a burst pipe. How to insure your home against mold:

- ▶ **Review.** Carefully read your homeowner's policy to identify when mold damage and cleanup are covered.
- ▶ **Action.** Ask your insurer if it offers mold cleanup insurance. Some insurers cover mold claims and price policies accordingly.

Others exclude mold, but offer an attachment to the policy called an "endorsement" that allows you to add mold coverage. Still other companies may provide a tighter definition of what is and what is not covered.

### 15 Is your car properly covered?

To protect your car against damage from disasters, you need comprehensive auto-insurance coverage, says Jeanne Salvatore of the Insurance Information Institute. Comprehensive coverage reimburses you for loss due to theft or damage caused by something other than a collision with another car or object, such as fire, falling objects, earthquake, windstorm, and other natural disasters. States do not require that you purchase collision or comprehensive coverage.

### 16 Do you own a home business?

If you run a business out of your home, be sure you have adequate coverage if equipment and furniture are damaged or destroyed by an insured disaster. Most homeowner's policies cover business equipment in the home up to \$2,500 and typically offer no business liability insurance. Ask your insurer about coverage for equipment that exceeds this level.

### 17 Pay less for insurance coverage

The price paid for homeowners insurance can vary by hundreds of dollars, depending on the size of your house and the insurer. Jeanne Salvatore offers these tips:

- ▶ **SHOP AROUND.** Get at least three price quotes. You can call companies directly or access information on the Internet. Your state insurance department may also provide comparisons of prices charged by major insurers.
- ▶ **RAISE YOUR DEDUCTIBLE.** A deductible is what you will have to pay out of pocket before an insurance company starts to pay a claim. The higher your deductible, the more money you save on your annual premium.

- ▶ **CONSOLIDATE YOUR COVERAGE.** Buy your home and auto policies from the same insurer. Some insurance companies will reduce your premium by 5 percent to 15 percent if you buy two or more insurance policies from them. Make certain this combined price is lower than buying coverage from different companies.
- ▶ **RISK-PROOF YOUR HOME.** Find out from your agent or insurer on what you can do to make your home more resistant to windstorms and other natural disasters. Such steps often result in a reduced premium.
- ▶ **ASK ABOUT DISCOUNTS.** You can usually get discounts of at least 5 percent for a smoke detector, burglar alarm or dead-bolt locks. Ask your insurers about additional discounts for modernizing plumbing or electrical systems and for personal reasons, such as being at least 55 years old and retired.
- ▶ **GET GROUP COVERAGE.** If your employer administers a group insurance program, see if it offers a homeowners policy. In addition, professional, alumni and business groups may offer an insurance package at a reduced price.
- ▶ **STICK AROUND.** If you've been insured with the same company for several years, you may receive a discount for being a long-term policyholder. To ensure you're getting a good deal, periodically compare this price with the prices of policies from other insurers.
- ▶ **REVIEW YOUR POLICY.** Each year, see if your policy still needs to cover possessions you no longer own or are no longer worth the original value.

## 18 Who needs earthquake insurance?

If you live in California, you face higher risk of earthquake and home damage than residents in most other states in the continental U.S.

**SOLUTION:** Buy a separate earthquake policy, which is available from most insurance companies. The cost will depend on your proximity to major faults and the risk of being

affected. To encourage more Californians to buy coverage, the California Earthquake Authority (CEA) recently approved an average 22 percent rate cut starting July 1, 2006.

## 19 Are you fully covered for wildfires?

Each year, wildfires burn thousands of acres and homes in the drought-prone West, Southwest and Northwest. Home damage caused by fire is covered under most standard, home and renters policies. Disputes often emerge when renovations have increased your home's size. Steps to take:

**Provide up-to-date information.** Tell your insurer about the size and condition of your home. Claim disputes over a home's size are increasingly common when insurers do not have a record of home additions on file.

**Document your home's exterior appearance.** Use a camera or camcorder.

**Store the images in a safe place far from your home.** Otherwise, your insurer may be forced to base damage payments on old information.

## 20 Protect your home against high winds

Each year hurricanes, tornadoes and high-wind storms damage homes in the Midwest, Northeast, South, and Hawaii.

### FOR WINDOWS:

- Install temporary plywood shutters before a hurricane.** Or install storm shutters or impact-resistant laminated glass on all windows for more permanent protection.
- Buy the right windows.** Look for windows that say ASTM E1996 and E1986, or the words "Broward-Dade County Approved," which signify the ability to withstand the impact of a wood 2x4 traveling at 34 mph.
- Ask the government.** Visit the Federal Emergency Management Agency's web site ([www.fema.gov](http://www.fema.gov)) for more information about protecting windows and other parts of your home.

**FOR DOORS:**

- Install the right garage doors.** They should be windowless, no wider than the standard 9 feet and rated to withstand at least 50 pounds of pressure per square foot (look for a sticker on the door).
- Brace or shutter other doors.** Vertical braces, installed after the door is closed, are the most effective.
- Shutter the entire entry-door area,** including sidelights and transoms.
- Check all entry doors.** See that they're rated for wind conditions in your area (check with your building department or The Institute for Business and Home Safety, [www.ibhs.org](http://www.ibhs.org)).

**FOR THE ROOF:**

- Reinforce the underside of an existing roof.** Use a wood adhesive rated AFG-01 and certified by an independent test lab.
- Strengthen connections.** Add hurricane clips and other reinforcements at the connections.
- Fasten roof sheathing to the rafters.** Use 8d (eight-penny) ring-shank nails, which have an angular, serrated surface for tear-out resistance.
- Add a secondary moisture barrier.** Use adhesive joint taping or an ice-and-water shield to protect against wind-driven rain.

**21 How to protect a mobile home**

High winds sweeping under or over a home can lift it off the ground. Take the following protective steps:

- ▶ **GET AN INSPECTION.** Anchors, straps, and tie-downs that hold homes in place can become loose or corroded over time. They should be regularly inspected. Look for an inspector with experience specific to mobile homes.
- ▶ **ASK THE RIGHT QUESTIONS.** Find out from an inspector how many tie-downs and anchors are needed for your home,

for the soil conditions under the home, and to fulfill any local regulations.

- ▶ **STAY INFORMED.** Single-wide mobile homes need anchors and tie-downs for the bottom and over the top. Tie-downs should be installed evenly, avoiding utility connections below the home. Over-the-top tie-downs should be set on rafters.
- ▶ **PROTECT YOUR ROOF.** Install roof brackets to prevent roof damage.
- ▶ **WEIGH YOUR ANCHORS.** Tie-down anchors that are set in concrete, hard rock, or a foundation are better than auger or corkscrew-style anchors that go into the soil.
- ▶ **ADD EXTRA PROTECTION.** Consider installing tie-downs at the front and rear of the home, as well as the sides.
- ▶ **BOARD THE WINDOWS.** Install temporary plywood shutters before a hurricane.

**22 Eliminate your home's loose threats**

The risk of damage to you and your home is greater when loose items inside and outside are not properly secured or stored. What to do:

- Walk your yard.** Look for loose parts of structures (patios, porches, fences, etc.) outside of your house. If you can shake them with your hand, secure them or remove.
- Fix energy sources.** Check for any loose electrical wiring or shaky gas connections, inside and outside. Repair them if you can or call a contractor if you can't.
- Fasten shelves and hanging units inside.** Place heavier items on lower shelves.
- Move wall-hangings from over beds and couches.** These include pictures, mirrors, and other items.
- Secure your heater.** Make sure your water heater is strapped to wall studs or another solid base.
- Remove overhead fans.** Do so if a severe windstorm watch or warning has been issued.



## 23 Flooding: How to minimize damage

While there isn't much you can do to prevent rising water from entering your home once it reaches the ground-floor level, there are steps that the Institute for Home Safety ([www.ibhs.org](http://www.ibhs.org)) recommends to minimize water damage:

- ▶ **KEEP PAPERS DRY.** Store important papers and photos in airtight, waterproof plastic containers.
- ▶ **MOVE IMPORTANT ITEMS.** Bring papers and other important family mementos from the basement to the living area or attic. Keep them away from exterior walls.
- ▶ **CAP THE GAPS.** Plug and seal cracks and holes in external walls, joints, and foundations within one foot of the ground level.
- ▶ **SHIELD WINDOWS.** Make sure basement windows and doors have built-up barriers or flood shields that extend above the base flood elevation.
- ▶ **INSTALL SUMP PUMPS** in below-grade floors. A battery backup system is recommended. Be sure the sump pump operates correctly and will discharge water as far away from the house as possible.
- ▶ **ADD BACKFLOW VALVES** or standpipes. These can prevent sewer lines from backing up.
- ▶ **INSTALL APPLIANCES CORRECTLY.** Raise them and associated electrical wiring above the base flood elevation. If you are unable to raise a particular item, consider protecting it with a floodwall or shield.

## 24 How to minimize mudslide damage

Mudslides can occur in any state. While some mudslides move slowly and cause damage gradually, others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. To minimize vulnerability:

### Plant ground cover on slopes.

Also build retaining walls; both can keep mudslides in check.

### Erect channels or deflection walls.

These direct the flow around buildings in potential mudflow areas. But remember that if you divert a mudflow or any water and it crosses to a neighbor's property, you may be liable for damages.

### Insure your home.

Use a national flood insurance policy from the National Flood Insurance Program (888-379-9531 or [www.floodsmart.gov](http://www.floodsmart.gov)). It will cover mudflows, which almost always are a byproduct of heavy rains and flooding, which isn't covered by most standard policies. A flood insurance policy must be purchased through a local insurance agency.

## 25 Protect your home against wildfires

While there's little you can do to completely isolate your home from the perils of large-scale wildfires, you can minimize the odds of damage and destruction by taking the following steps:

- Ask local experts.** Contact your local fire department and insurer for preventive measures specific to your area and surroundings.
- Clear the roof, gutters and sundecks.** Remove pine needles, leaves and other dry debris.
- Clear all dry grass, brush and dead leaves.** The area cleared should be at least 30 to 100 feet around your home.
- Install ½-inch mesh screen.** Do it from all overhangs down to the ground to minimize spark and ember penetration.
- Enclose wooden stilts.** Use non-combustible material such as concrete, brick, rock, stucco or metal.
- Protect balconies and decks.** Enclose their undersides with fire resistive materials.
- Cover house vents.** Use ¼-inch corrosion-resistant wire mesh. Vents can allow embers and flaming debris to enter the home.

- Install spark arrestors.** Place them in chimneys and stovepipes to prevent embers from escaping through the top.
- Buy a ladder that can reach the roof.** That way, you're prepared in case areas threatened by embers need to be hosed down.
- Create an emergency-tool zone.** Put it in your garage or shed with items for combating fire, including a rake, ax, handsaw or chain saw, a bucket and shovel.
- Maintain an emergency water supply.** This should comply with fire department standards and include an emergency storage tank that holds at least 5,000 gallons.

## 26 How to choose a back-up generator

When power goes out, back-up generators can help run essential appliances such as refrigerators. But most generators run on fuel and can be dangerous. Be sure you spend time in advance learning how to operate them:

### ▶ **KNOW YOUR NEEDS.**

Most portable models are strong enough to power plug-in appliances and lights but not heavy power drains like central air. Before you shop for a unit, add up the watts for the items you'll likely need to run. Figure on about 600 watts for a refrigerator, 1,300 watts for a portable heater, 1,000 watts for a window a/c, and 60 to 200 watts for each lightbulb.

### ▶ **KNOW YOUR CHOICES.**

Wheeled portables are big sellers, but you may need large amounts of fuel on hand. That's because most home-sized models use 12 to 18 gallons of gasoline per day, and gas stations often shut down during blackouts. Stationary units mounted outside are a growing alternative, since they run on propane or natural gas and often supply more power. They're also designed to connect directly to your home's wiring and can turn themselves on and off as needed.

### ▶ **KNOW THE COST.**

Generators tend to cost thousands of dollars. In addition, expect to spend \$500 to \$1,000 to install a stationary generator. And for all types of units, plan on paying at least \$500 for a power-transfer switch to power hardwired circuits and avoid having to run extension cords.

### ▶ **KNOW THE HYPE.**

Manufacturers often overstate run time for gasoline models, basing their calculation on a 50 percent load. When we test models at CONSUMER REPORTS, we use a more conservative estimate of 80 percent load.

## 27 Keep your generator in tip-top shape

If you buy a backup generator, follow these routine maintenance steps to ensure that it will be ready when the lights go out:

### **Keep it clean.**

Use a damp cloth to wipe exterior surfaces, a stiff brush to loosen caked-on engine dirt and oil, a shop vacuum for loose dirt and debris and low-pressure air to blow away dirt.

### **Remove the gum.**

On a gasoline-powered generator, prevent gum from forming in the fuel system as the generator sits. Add stabilizer (about \$5 to treat 25 gallons) to the fuel tank. Run the engine for several minutes to circulate the stabilizer. Once stabilized, fuel can be safely stored for up to a year.

### **Check the oil.**

Many generators shut down automatically to protect the engine if the oil level gets too low. Check the oil level whenever you add gasoline. On models that run on propane or natural gas, check the level at intervals specified in your owner's manual. Keep a couple of quarts of oil on hand for emergencies.

### **Make regular changes.**

Change the engine oil, carburetor air filter, fuel filter, and spark plug regularly according to the owner's manual.

**Run the unit.**

Once every few months, run the generator to ensure that it will start when you need it. Some larger stationary generators periodically cycle themselves on and off automatically.

**Beware of CO-poisoning.**

To prevent carbon-monoxide poisoning, never operate a generator inside a house or garage. Also be sure the generator is at least 15 feet from the house to prevent exhaust fumes from entering through windows, doors, and air conditioners.

**Store the generator properly.**

Use a well-vented shed or other protected area away from the house and any fire source.

**28 Create a family emergency plan.**

When disaster strikes, there's often little time to plan carefully. In many cases, all family members may not even be together in one place. To protect your family, draw up an emergency plan now and rehearse it. Your plan should identify:

- ▶ **SAFE SPOTS.** The safest locations in your home include load-bearing interior walls or doorways during an earthquake and the basement during a tornado.
- ▶ **KEY TASKS.** Teach family members how and when to turn off the water, gas, and electricity in case of damaged utility lines.
- ▶ **MEETING PLACES.** Designate two places where your family will reunite after a disaster—one near your home and another outside your neighborhood. Provide family members with a wallet card with relevant addresses and phone numbers. Also, be sure those numbers are stored in cell phones.
- ▶ **COMMUNICATIONS.** Establish a long-distance point person as central command. This person should know how you and family members are likely to communicate—by phone, e-mail or cell phone text messages—and how to use the technology of choice.

- ▶ **SHARE SECRETS.** Be sure family members know where emergency kits, key documents, medications and cash are located.
- ▶ **PRACTICE FIRE DRILLS.** Replace batteries in smoke alarms annually and practice safe home-evacuation drills. Own a fire extinguisher and be sure all family members know where it is and how to use it effectively. Also store a hose that can reach into your house.

**29 Draw up an evacuation plan**

Planning escape routes and targeting destinations in advance of a disaster can help minimize stress when evacuating. Follow these tips:

- Know your destination.** List hotels, homes of family and friends, and public shelters in a 100-mile radius from your home.
- Buy a local map.** Highlight your evacuation route and likely destinations. Avoid waterside roadways along the seashore, lakes and canals.
- Drive the route.** Observe how much fuel you use and note the gas stations along the way. Plot the stations on your local map.
- Plan to leave early** when the weather is still nice. Roadways may be jammed.
- Prepare to stay local**, if possible, with family or friends. Go to your target hotels if family or friends also have evacuated.
- Consider public shelters** only as a refuge of last resort.

**30 Identify “safe rooms” in your home**

Severe windstorms pose serious threats to your home and family. Designate or build a safe room in your house where family members can seek refuge.

- ▶ **KNOW THE PURPOSE.** A safe room should be able to

withstand high winds and flying debris, even if the rest of the residence is severely damaged or destroyed.

- ▶ **GET THE GUIDE.** FEMA offers a free guide (#320): "Taking Shelter From the Storm: Building a Safe Room Inside Your House" at its Web site ([www.fema.gov](http://www.fema.gov)).

### 31 Set up a crisis pantry

Disasters may trap you in your home for days. Keep the following necessities on hand in a specific location in the event that utilities and roads are knocked out:

- Water**—at least one gallon daily per person for three days.
- Food**—non-perishable packaged or canned foods and juices for the same time period.
- Non-electric can opener**—if power is out, your electric opener won't work.
- Special food**—for infants and very old family members, as well as pet food.
- Cooking tools**—including sterno fuel.
- Paper plates** and plastic cups and utensils, since you may not have clean water or power for the dishwasher.

### 32 Prepare 3 emergency "dash" kits

If you must evacuate quickly, you won't have much time to gather what you need. Tony Carper, Director of Broward Emergency Management Agency in Florida, suggests packing three "dash" kits that can be grabbed in minutes—and letting family members know where they're stored:

#### I. BASIC NEEDS KIT

This one will hold your necessities. Many items can be boxed and taped with an inventory list attached for faster loading and evacuation:

- Water**—one gallon of water per person per day for at least three days, for drinking and sanitation.

- Food**—three-day supply of non-perishable food.
- Sleeping bags**—and inflatable pillows.
- Clothing**—and sturdy, waterproof shoes or boots.
- Radios**—battery-powered or hand-crank model and a NOAA Weather Radio with tone alert.
- Flashlight**—preferably a waterproof model.
- Batteries**—spare sets for the radios and flashlight.
- Plastic sheeting**—and duct tape or a tent for temporary shelter.
- Non-electric can opener**—for food.
- Map**—of your area with evacuation route and destination highlighted.
- Baby items**—and any items needed for very old family members.
- Pet supplies**—food and medicines.

#### II. HEALTH SUPPLIES KIT

Medications and the names and numbers of doctors should be stored in a waterproof bag:

- Drugs**—two-week supply on hand—prescription and/or OTC medicines you use regularly (Ask your doctor for additional prescriptions in case you must fill them away from home).
- Glasses**—spare set.
- First aid kit.**
- Moisture wipes**—and garbage bags for personal sanitation.
- Ailment items**—Go to the web sites of groups for specific health conditions, such as diabetes, to find out what to pack in case of evacuation.
- Doctors**—make a list of providers in a 100-mile radius of your home and their phone numbers. Consider having a copy of medical records sent there in case your local doctor's office is damaged.

### III. FINANCIAL PAPERS KIT

Store cash and copies of key documents in a waterproof/fireproof strong box with a handle. Or scan documents into your computer and copy the digital files onto a blank CD disc or flash drive. What to store:

- Cash**—or traveler's checks.
- Blank checks**—in case you need to write checks or provide account numbers over the phone.
- Emergency contacts**—including lawyers, financial advisers, etc.
- Account numbers**—and contact phone numbers for banks, credit-card issuers, and brokerage accounts.
- PINs and passwords**—so you or family members can access vital accounts online from computers away from home.
- Insurance policies**—and contact information for your agent.
- Deeds**—and titles to property, estate documents such as your will, birth and marriage certificates and relevant employee benefits documents.
- Computer discs**—or flash drive holding critical documents from home computers.
- Safe-deposit box key**—for access, if needed.
- Negatives**—of irreplaceable personal photographs, protected in plastic sleeves.
- Home inventory list**—and pictures of possessions.

### 33 Create a pet emergency plan

If you must evacuate before or after a disaster, here's what you'll need on hand to care for your pet:

- ▶ **TRANSPORT.** Harnesses are better than collars for safety and security. Each pet should have its own crate, cage, or carrier. Be sure to include comfortable bedding, such as old blankets, and any toys to help your pet feel more secure.
- ▶ **IDENTIFICATION.** All pets should wear ID tags with emergency-contact information in case you become

separated. Write the same information in indelible marker on the pet harness. Include feeding and medical information, as well as a description of any behavioral issues. Keep a copy of records and identification photos of your pet with you at all times.

- ▶ **HEALTH.** Pack three to seven days' worth of nonperishable food and water for your pet, as well as a week's supply of any necessary medicine. Take separate bowls for food and water.
- ▶ **SANITATION.** Pack paper towels, liquid dish soap, a small bottle of household bleach, and a package of garbage bags. This will keep an already difficult situation from getting any messier.

### 34 Consider a national bank account

Many local banks along the Gulf Coast were damaged or destroyed during the violent hurricane season of 2005, delaying account holders' access to cash and assets. To minimize this risk, consider opening a low-cost or free account at a national financial institution, so that cash and accounts can be accessed at any branch or ATM nationwide.

### 35 Protect papers and valuables

Seal all papers and valuables that you plan to leave behind in the event of an evacuation in airtight and waterproof plastic bags or containers to prevent water damage. This includes documents in safe-deposit boxes, since many bank boxes are water resistant but not waterproof.

### 36 Bring your car up to speed

Keep your car in top condition particularly during storm and drought seasons. What to check:

- GAS**—keep the tank full.
- FLUIDS**—regularly check the oil, coolant, windshield-washer and transmission fluids.
- HOSES**—replace bulging or cracked hoses and tighten hose clamps.



- OIL**—change the oil and filter based on the schedule in the owner's manual.
- AIR**—regularly check the pressure of tires and the spare.
- WIPERS**—clean the gunk off blades and replace if you see streaking.
- GLOVE COMPARTMENT**—store a flashlight and small hammer to smash glass if rising waters prevent you from opening doors or windows to escape. (ex: Life Hammer Escape Tool [[www.lifehammer.com](http://www.lifehammer.com)])
- EMERGENCY KIT**—store a roadside kit in the trunk.

### 37 Are your kids in good hands?

If you drop off children at a day-care center before heading to work, verify that the staff knows what to do if a disaster strikes before you're able to pick them up. If you employ an in-home child-care provider, create and post an easy-to-follow plan so they know when to evacuate, where to go, and how to contact you. Rehearse the plans quarterly, advises Sacha Taylor, founder of Nannies + More, a childcare referral agency in Atlanta that adds emergency measures to nanny-parent work agreements.

### 38 Keep a corded phone at home

While cordless phones are convenient when wandering around the house, they will not work if your power goes out. That's because cordless phones must be plugged into wall sockets to operate. By contrast, a corded phone receives power through phone jacks, which may provide power in a blackout if phone lines are intact.

### 39 Back up your home computers

Prevent the loss of key files in a disaster by regularly backing up your computers. Here are your options:

- ▶ **EXTERNAL HARD DRIVE.** This is a modem-sized box that can store the contents of multiple home computers, including digital music and home video files. Be sure to match capacity to your needs.

- ▶ **FLASH DRIVE.** This is a stick the size of a pack of gum that plugs into your computer's USB port. Capacity varies, so you may need more than one. Also consider a model that requires a security password.
- ▶ **BLANK CDS.** Ideal for copying a limited number of important documents and files. Again, capacity varies.
- ▶ **E-MAIL.** You can send yourself important files to another computer. Then you can download the files remotely from that computer if your home computer is damaged or inaccessible.

### 40 Where to hide your valuables

If you don't own a waterproof safe, you can place valuables you won't be evacuating in airtight plastic bags or containers and store them in a windowless room, such as a closet, on a high floor. If your home is threatened by wildfire, place valuables that will not be damaged by water in a pool or pond.

### 41 Know how to turn off utilities

To protect your family and home, you may need to turn off utilities at points where they enter your home either before or after a disaster. What to do now, while all is calm:

#### Locate valves and switches.

Call your local gas, water and electric providers.

#### Ask for instructions.

Find out how to turn off utilities properly, when to do so, and whom to call to turn them back on after the crisis has passed. For example, you must call a professional to turn on your gas line once it has been turned off. Then laminate and post them along with utility phone numbers.

#### Find out how to inspect valves and switches.

Be sure they are well oiled and haven't decayed or rusted solid.

#### Tag master valves and switches.

Use waterproof labels that clearly define them, and point them out to family members.

## 42 First-aid basics—for family and pets

The American Red Cross provides important information on first aid not only for humans, but also dogs, cats, birds, reptiles, and other pets. The Red Cross's "Pet First Aid" is available for \$12.95 at [www.redcrossstore.org/shopper](http://www.redcrossstore.org/shopper). A pet's first-aid kit should include gauze pads, gauze roll or bandages, cloth roll, thermometer, tweezers, hydrogen peroxide, antibiotic ointment, cotton swabs, an instant cold pack, and rags or rubber tubing for tourniquets. Speak to your veterinarian about other supplies your pet might need.

## 43 Keep an eye on dangerous weather

The National Weather Service provides updates online of severe weather and threatening conditions:

- ▶ **TROPICAL STORMS.** The National Hurricane Center features 30-minute updates of tropical storms as well as five-day forecasts and predicted paths ([www.nhc.noaa.gov](http://www.nhc.noaa.gov)).
- ▶ **TORNADOES.** The Storm Prediction Center offers national "fire weather" updates as well as tornado, hail and severe thunderstorm watches ([www.spc.noaa.gov](http://www.spc.noaa.gov)).
- ▶ **FLOODS.** The Interactive Weather Information Network provides constantly updated National Weather Service warnings and bulletins for floods, storms and other dangerous weather conditions. User-friendly format allows you to click on your state and city for local warnings. ([www.iwin.nws](http://www.iwin.nws), [www.noaa.gov](http://www.noaa.gov)).
- ▶ **WILDFIRES.** The National Fire News lists daily updates on wildfires burning throughout the U.S., the national preparedness level, the locations of blazes and their status. ([www.nifc.gov/fireinfo/nfn.html](http://www.nifc.gov/fireinfo/nfn.html)).

## 44 Buy a tone-alert radio

If you live in an area at risk for dangerous weather and other natural disasters, consider installing one or more "tone alert radios" in your home:

- ▶ **What they are.** Tone alert radios cost about \$30 and automatically turn on when the National Oceanic & Atmospheric Administration (NOAA) broadcasts a hazard alert for your area.
- ▶ **How they work.** When a weather watch or warning is issued, the radio automatically turns on, issuing a piercing tone followed by the continuous broadcast of weather forecasts, threatening conditions and safety steps.
- ▶ **Why they matter.** A tone-alert radio can alert you and your family to a threatening tornado, wildfire and other hazard while you're asleep—giving you time to prepare, seek shelter or evacuate.

## ▶ DURING A CRISIS

### 45 What is a weather watch?

When the National Weather Service issues a weather "watch," the conditions exist for dangerous storm activity. Steps to take:

- ▶ **FAST-MOVING STORMS.** When watches are issued for thunderstorms, tornadoes or flash floods, monitor weather reports, clear your yard of loose items, and be prepared to protect your house and seek shelter.
- ▶ **LONGER-LASTING STORMS.** When watches are issued for hurricanes and blizzards, stock up on supplies, monitor the weather, and prepare to evacuate if you live near the ocean or large bodies of water.

### 46 What is a weather warning?

A weather "warning" issued by the National Weather Service is more urgent than a "watch." A warning means that dangerous weather has already been identified and threatens your area. Steps to take:

- ▶ **FAST-MOVING STORMS.** When a warning is issued, a severe thunderstorm, tornado or flash flood is already occurring. In the case of a tornado, take shelter immediately.

- ▶ **LONGER-LASTING STORMS.** A hurricane warning means sustained winds of at least 74 mph are expected and that the storm is 24 hours away from your area. You should either evacuate immediately or seek safe shelter. A winter storm warning means blizzard conditions are expected and you should avoid traveling.

## 47 Ride out the threat or evacuate?

What to consider when considering evacuation—and when to make the critical decision:

### If advised to evacuate.

Do so immediately. Follow the advice of authorities on which routes to take and other important directions.

### If time allows.

Call or e-mail your out-of-town contacts to let them know where you are going and when you expect to get there. Leave a note telling others when you left and where you are going. Check with neighbors who may need a ride or other assistance.

### If you need shelter.

Call the Red Cross hotline (866-438-4636) for the nearest Red Cross emergency shelter.

## 48 What to do when disasters loom

As soon as you hear in five-day weather forecasts that hurricanes, wildfires or heavy rains may threaten your area, it's time to start thinking defensively. What to do:

### DAYS BEFORE:

- Monitor** your "tone-alert" radio (see Tip. No. 44) for local weather and check the NOAA.gov web site to track broader storm or wildfire activities.
- Stock up** your SOS pantry (see Tip No. 30).
- Photograph** your house for insurance purposes and send digital images to yourself and a friend before you leave.

- Gather your three emergency kits** (see Tip No. 31) and other necessities in a centralized location in your home.
- Review** your family emergency plan and evacuation map route.
- Call ahead** to hosts or hotels where you'll be staying.
- Clear** the yard of loose items, such as chairs, toys, tools and hoses.
- Fill your car** with gas and check your tires, including the spare.
- Prepare the exterior of your home** based on the type of disaster that threatens (see Tip No. 20).
- Contact** your gas, water and electric companies to find out if and when you should turn off utility service to your home. Visit all of the main valves and switches to remind you of their locations.
- Fill the tub with water** after lining it with plastic sheeting.
- Review your safe room.**
- Keep pets inside** or in restricted areas until the threat passes.

### IF ORDERED TO EVACUATE:

- Activate your family emergency plan.**
- Alert your long-distance point person** about your status and intended destination.
- Load emergency kits and other supplies into your car.** Store a small hammer in the glove compartment in case a window must be smashed for escape.
- Review your map and directions to your safe house—** a hotel or the home of family or friends.
- Evacuate early to avoid being stranded.**
- Use routes designated by local authorities.** Do not take shortcuts, since they may be blocked or damaged.
- Watch for washed-out roads and bridges.** Do not drive into flooded areas.

- Avoid driving over or stepping on downed power lines.**
- Go to a public shelter as a last resort.** Shelters are not designed for comfort and do not usually accept pets.

## 49 Hurricane do's and don'ts

If a hurricane is due but no hurricane evacuation order was given, take the following steps:

- ▶ **SECURE YOUR HOME.** Do this by securing objects in your yard or bringing them inside, boarding up windows or securing storm shutters, and closing and bracing doors.
- ▶ **TURN OFF UTILITIES** if instructed. Otherwise, turn the refrigerator's thermostat to its coldest setting and keep the door closed.
- ▶ **FILL THE BATHTUB** with water. Also fill other large containers.
- ▶ **STAY AWAY** from windows and glass doors.
- ▶ **KEEP** curtains and blinds closed.
- ▶ **SEEK REFUGE.** Choose a small interior room, closet, or hallway on the lowest level.
- ▶ **LIE** on the floor under a table. Or choose another sturdy object.
- ▶ **DON'T GO OUTSIDE.** It is too easy to be hit by flying debris. Also don't be fooled if there is a lull in the wind; you could be experiencing the storm's eye. Winds will likely pick up again.

## 50 Tornado do's and don'ts

If weather reports or your "tone-alert" radio issues a tornado warning, seek shelter immediately. Steps to take if you are:

### IN A BUILDING.

Go to a pre-designated shelter area or the lowest building level. If there is no basement, go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls. Put as many walls

as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. Do not open windows.

### IN A VEHICLE OR MOBILE HOME.

Get out immediately and, if possible, go to the lowest floor of a sturdy, nearby building or a storm shelter. Mobile homes, even if tied down, offer little protection from tornadoes. Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter.

### OUTDOORS WITH NO SHELTER.

Lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding. Do not go under an overpass or bridge. You are safer in a low, flat location. Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.

## 51 Wildfire home-protection strategies

Before the wildfire approaches your area, remove family members and pets from the house. Then prepare your home to minimize damage:

- Remove** combustible items from around the house.
- Close** outside basement vents, windows, and doors. But leave them unlocked.
- Take down** flammable drapes and curtains.
- Close** all shutters. Also clear blinds or heavy non-combustible window coverings to reduce radiant heat.
- Close** all interior doors.
- Open** the damper in your fireplace. But close the fireplace screen.
- Shut** off natural gas, propane or fuel oil supplies at the source.
- Connect** garden hoses and fill large containers with water.

- Fuel** gas-powered pumps for water.
- Place** a ladder against the house. Put it in clear view for firefighters.
- Back** your car into the driveway and roll up the windows.
- Close** all garage doors.
- Disconnect** automatic garage door openers. That way doors can be opened by hand.
- Load** car for quick departure.
- Turn** on outside lights. Leave a light on in every room to make the house more visible in heavy smoke.

## 52 Wildfire safety: Trapped at home

Don't try to outrun a wildfire if it reaches your house before you've departed. If you cannot leave the area, FEMA advises that you go back into the house. You can survive inside. The fire will pass before your house burns down.

## 53 Wildfire safety: In a vehicle

Don't attempt to get out and outrun a wildfire. In an emergency, you can survive the firestorm if you stay in your car. It is much less dangerous than trying to run from a fire.

**Roll up** your vehicle's windows and close air vents.

**Drive slowly** with headlights on.

**Watch for** other vehicles and pedestrians.

**If you have to stop**, park away from the heaviest trees and brush. Turn headlights on and ignition off. Roll up windows and close air vents. Get on the floor and cover up with a blanket or coat until the main fire passes. Metal gas tanks and containers rarely explode.

## 54 Wildfire safety: Caught in the open

The best temporary shelter is in an area with little foliage. On a steep mountainside, the backside—away from canyons and ravines—is safer.

**If a road is nearby**, lie face down along the road cut or in the

ditch on the uphill side. Cover yourself with anything that will shield you from the fire's heat.

**If hiking in the woods** or wilderness, seek a depression with sparse fuel. Clear fuel away from the area while the fire is approaching and then lie face down in the depression and cover yourself. Stay down until after the fire passes.

## 55 Flood do's and don'ts

If serious flooding is likely in your area, take the following steps:

- ▶ **IF THERE'S NO TIME.** Move immediately to higher ground, even if there is possibility of a flash flood. Do not wait for instructions to evacuate.
- ▶ **IF YOU HAVE TIME.** Bring in outdoor furniture. Move essential items to an upper floor. Turn off utilities at the points where they enter your home if instructed to do so. Disconnect electrical appliances, but do not touch electrical equipment if you are wet or standing in water.
- ▶ **IF YOU EVACUATE.** Place a small hammer (ex: Life Hammer Escape Tool [[www.lifehammer.com](http://www.lifehammer.com)]) in your glove compartment in case you must shatter a window to escape your vehicle. Do not walk through moving water. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- ▶ **AS YOU DRIVE.** Do not enter flooded areas. If floodwaters rise around your car, abandon the car immediately and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

## 56 Mudslide do's and don'ts

Mudslides can occur after heavy rains and provide little advance warning. Steps to take:

**Stay alert and awake.** Many debris-flow fatalities occur when people are sleeping. Install a "tone-alert radio" or listen to radio and TV weather warnings of intense rainfall. Be aware that heavy, short bursts of rain may be particularly dangerous, especially after longer periods of heavy rainfall and damp weather.



**Listen for sounds of moving debris**, such as trees cracking or boulders knocking together. A trickle of flowing or falling mud or debris may precede larger landslides. Moving debris can flow quickly and sometimes without warning.

**Watch streams** for sudden increases or decreases in water flow. Also watch for a change from clear to muddy water. Such changes may indicate landslide activity upstream. Be prepared to move quickly.

**Watch the road** when driving. Look for collapsed pavement, mud, fallen rocks, and other indications of possible debris flows.

**Get out of the path** if you suspect imminent danger. If escape is not possible, curl into a tight ball and protect your head.

## 57 Earthquake do's and don'ts

When an earthquake's vibrations start, minimize your movements to a nearby safe place and stay indoors until the shaking has stopped.

### IF YOU'RE INDOORS:

**Drop to the ground.** Take cover under a sturdy table or other piece of furniture, and hold on until the shaking stops. Or cover your face and head with your arms and crouch in an inside corner of the building.

**Stay away from windows.** Also avoid outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.

**Stay in bed** if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.

**Use a doorway** for shelter only if it is nearby. Also, be sure you know it is a strongly supported, loadbearing doorway.

**Stay inside** until shaking stops and it is safe to go outside.

**Do not** use elevators.

### IF YOU'RE OUTDOORS:

**Move away** from buildings, streetlights, and utility wires.

**Stay** in the open until the shaking stops.

### IF YOU'RE IN A CAR:

**Stop** as quickly as safety permits. But avoid stopping near or under buildings, trees, overpasses, and utility wires.

**Stay** in the vehicle.

**Avoid** roads, bridges, or ramps that might have been damaged by the earthquake.

### IF YOU'RE TRAPPED UNDER DEBRIS:

**Cover** your mouth. Use a handkerchief or clothing.

**Tap** on a pipe or wall so rescuers can locate you. Use a whistle if one is available.

**Don't** shout randomly. It can cause you to inhale dangerous amounts of dust.

## 58 Cars and power-line hazards

During a violent windstorm, live power lines can snap loose and remain dangerous until secured by the power company. If you are driving during an evacuation when a power line falls on your car...

- ▶ **STAY PUT.** The inside of your vehicle is the safest place. Warn people outside of your car not to touch the vehicle or the line. Call or ask someone to call the local utility company and emergency services. Leave your car only if the vehicle catches fire.
- ▶ **LEAP TO EXIT.** If you must leave the car, open the door and jump clear of the vehicle. You want to clear the vehicle completely before touching the ground. Otherwise you risk shock.
- ▶ **SHUFFLE AWAY.** Once clear from the car, shuffle at least 50 feet away, with both feet on the ground. Call for help immediately.
- ▶ **WARNING.** You risk shock if you try to help someone else from the car while you are standing on the ground. Urge them to jump clear before providing assistance.

## 59 When to question official instructions

Government and building officials usually base evacuation instructions on manuals and earlier experiences. But what worked in the past may not work for every situation, says Jural Aviv, author of *Staying Safe*, and following them in some cases can put you at greater risk. Steps to take:

### Use your gut.

If official instructions defy logic, consider going with your instinct. For example, choosing a different emergency stairway to exit a building may be wiser than moving down a stairway already clogged with slow-moving evacuees.

### Beware of jams.

When evacuating crowded areas in buildings, moving behind a pillar to scan for alternate exits may make more sense than blindly following instructions to remain in line and stay calm. Crowding comes with a higher risk of panic, stampedes and being crushed or trampled.

### Get far away.

In most cases, it's better to get completely clear of an area in danger rather than standing on the street or returning prematurely. Secondary events can occur that create greater danger than the initial event.

## ▶ AFTER A CRISIS

## 60 Did you stay? Do's and don'ts

If you rode out a disaster at home, you'll likely want to move around your house as soon as the threat ends to survey damage and look in on neighbors. Important do's and don'ts:

**DO** beware of damaged roofs and walls.

**DON'T** ignite matches, candles or devices requiring an open flame. If gas is leaking, you could cause an explosion. Use a flashlight instead.

**DO** check your home's utilities—gas, water and electrical lines—for damage. Do not try to repair damaged gas or electrical lines. Call a professional.

**DON'T** use the water for drinking or preparing food until you are absolutely certain it is not contaminated.

**DON'T** eat food that came in contact with floodwaters.

**DO** wear protective clothing and possibly an N-95 disposable mask (respirator) while cleaning up debris. Wear rubber gloves while scrubbing flood-damaged interiors and furniture.

**DO** walk on firm ground outside. Even water that's six inches deep can be fast moving and knock you off your feet. Also, standing water may be electrically charged from downed power lines.

**DO** beware of snakes, insects and wild animals seeking refuge from floodwaters.

**DON'T** drive unless necessary. Roads may be impassable due to fallen trees, flooding and mudslides.

## 61 Blackout? Beware of food and water

If your power goes out and returns in less than two hours, the food in your refrigerator and freezer should be safe to consume. But if your power is out for longer, there's higher risk that your food and water will be contaminated.

### STEPS FOR FOOD:

**Freezer section.** A full freezer should hold food safely for 48 hours. A freezer that is half full will hold food safely for up to 24 hours. Do not open the freezer door if possible.

**Refrigerated section.** Remove milk and other dairy products, meat, fish, eggs, gravy, and spoilable leftovers into a cooler surrounded by ice—if ice is available. Inexpensive Styrofoam coolers are fine for this purpose.

**Before cooking or eating.** Check food using a digital quick-response thermometer. Throw away food that has a temperature of more than 40 degrees Fahrenheit.

### STEPS FOR WATER:

**Boiling water** for 1 minute will kill most organisms.

**Using bleach.** If boiling is impractical, treat water with chlorine tablets, iodine tablets, or unscented household chlorine bleach (5.25% sodium hypochlorite). Add 1/8 teaspoon

per gallon of water if the water is clear. For cloudy water, add ¼ teaspoon of bleach per gallon. Mix the solution thoroughly and let it stand for about 30 minutes before using.

**Don't rely on tablets.** Boiling is the best way to purify water. Treating water with chlorine tablets, iodine tablets, or liquid bleach will not kill parasitic organisms and requires proper measurement to maintain efficacy and safety.

## 62 Returning home? Don't rush inside

Most people who return home after an evacuation want to rush inside to evaluate damage and rescue belongings. Follow FEMA's advice first:

- Walk around the outside.** Check for loose power lines, gas leaks, and structural damage.
- Stay out if you smell gas.** Also stay out if floodwaters remain around your home.
- Turn on** a battery-powered flashlight before entering.
- Poke through debris** with a stick before moving forward. That lets you avoid confronting animals and snakes that may have sought refuge inside.
- Don't smoke** or use oil, gas lanterns, candles, or torches inside a damaged home until you are sure there is no leaking gas or other flammable materials present.
- Check for natural gas.** If you smell gas or hear a hissing or blowing sound, open a window and leave immediately.
- Turn off the main gas valve.** Do this from the outside and call the gas company from a neighbor's home. If you shut off the gas supply, you will need a professional to turn it back on.
- Check the electrical system.** But only if you are dry and standing on a dry surface.
- Switch off your home's electricity** at the main fuse box or circuit breaker if appliances are wet. If the situation is unsafe, leave the building and call for help. Do not turn on the lights until you are sure they're safe to use.

- Shut the main water valve** if pipes are damaged. Check with local authorities to be sure the water supply isn't contaminated.
- Throw out all suspect food** and other supplies that may have become contaminated or come into contact with floodwater.
- Pump out the basement gradually.** Remove about one third of the water per day. Otherwise, if the surrounding ground is still waterlogged, rapid pumping could cause walls to collapse and floors to buckle.
- Disinfect items.** This includes those that may have been contaminated by raw sewage, bacteria, or chemicals. Also clean salvageable items.

## 63 Caring for pets after a disaster

After a storm passes, keep pets comfortable but confined. Familiar landmarks and scents may have changed, causing agitated animals to become confused and lost. Further, a storm may have created a range of outside hazards, including forcing wild animals closer to your home.

## 64 Right way to file an insurance claim

When your home has sustained significant damage, file your insurance claim as soon as possible, advises the Insurance Information Institute. Follow these steps:

- ▶ **STEP 1.** Phone your agent. Describe the damage and ask the following questions:
  - Am I covered?
  - Will my claim likely exceed my deductible?
  - When will your adjuster arrive to evaluate the damage?
  - How should I temporarily cover damage that exposes my home?
  - How long will it take to process my claim?
  - Should I seek repair estimates?
  - How can I reach you by cell phone and e-mail?

- ▶ **STEP 2.** Photograph the damage, especially areas that you plan to patch up or cover temporarily with boards or plastic.
- ▶ **STEP 3.** Make essential repairs. Take reasonable steps to protect your property from further damage. Save receipts for materials used and submit them to your insurance company for reimbursement.
- ▶ **STEP 4.** Relocate if necessary. Most homeowner's insurance policies provide coverage for the "loss of use" of your home. Keep records of all additional expenses incurred.
- ▶ **STEP 5.** List lost or damaged articles. Avoid throwing out damaged items until the adjuster has visited your home. Access your home inventory (see Tip No. 3). Make a copy for the adjuster and supply him or her with copies of receipts from damaged items.
- ▶ **STEP 6.** Request claim forms. Once you have notified your insurance company, it is required to send your claim forms by the end of a specified time period.
- ▶ **STEP 7.** Complete the forms. Send them in as soon as possible in order to avoid delays.
- ▶ **STEP 8.** E-mail updates. Keep your agent or insurance company representative up to date on all issues relating to decisions involving repairs and costs. When in doubt about what to do, ask. And save copies of all correspondence.
- ▶ **STEP 9.** Schedule an adjuster. Your insurance company will arrange for an adjuster to inspect your home. Work with your insurer's adjuster first. If you are dissatisfied with your claim, go back to your insurance company and negotiate. Hiring an adjuster for another opinion should be your last action.
- ▶ **STEP 10.** Await payment. Once you and your insurance company agree on the terms of your settlement, state laws require that you be sent payment promptly. In most cases, your claim will be processed quickly. If you have any questions about the claim filing laws in your state, call your insurance agent or your state department of insurance.

## 65 Disagree with your insurer?

If your claim has been denied—or if you think you are entitled to a larger settlement—push back rationally, says James Walsh, author of *Get Your Claim Paid*. What to do:

### Reject the first offer if you feel it's unfair.

Settling an insurance claim is a negotiation. If you don't ask questions or you accept the first settlement offer, the company will let it go at that.

### Know the general terms of your policy.

If you spend your energy on negotiation, you're more likely to get some satisfaction.

### Ask for specifics.

Your insurer should cite the specific language in your policy on which it is basing its payment decision. In some explanations of benefits, shady insurers defend declining coverage by referring to "policy provisions" or "state regulatory guidelines" rather than citing the specific policy provisions or state law.

### Review your policy.

Especially check the coverage limits for structures and personal possessions. Compare how your insurer is interpreting each type.

### Talk to the insurer's adjuster.

Ask about his or her conclusions and the reasoning.

### Appeal your insurer's decision.

You can do so if its adjuster stands by the original results.

### Contact your state.

If your appeal fails, consider filing a report with your state insurance department. Type your state's name and "state insurance department" into a search engine such as Google to find the right office.

### Consider legal help.

Consider consulting with or hire an attorney if your direct negotiations with the insurer are unsuccessful.

## 66 Avoid sneaky insurance traps

Victims of disasters and home damage are emotionally vulnerable and more likely to make errors when navigating the insurance process. James Walsh offers the following advice:

- ▶ **ASK FOR ID.** Do not allow adjusters or anyone else to inspect your property without proper identification. Then confirm the person's name with your insurer or your town clerk's office. The person posing as an adjuster may in fact be a thief.
- ▶ **BEWARE OF RAPID RELIEF.** Many insurers set up emergency claims offices in an affected area and offer fast settlements. Before you agree, be sure that language has not been added that says payment terminates the company's liability.
- ▶ **GET HELP.** If your insurance claims are complicated or you aren't near the property, consider hiring a licensed public adjuster. For about 10% of the insurer's payment, they'll review your policy, file the paperwork and troubleshoot problems.
- ▶ **CONSIDER YOUR OPTIONS.** Consider whether it will pay to rebuild your house or whether renting or buying smaller space and selling your damaged property makes more financial sense.
- ▶ **KNOW THE DEAL.** Some insurers will waive your deductible if you use a contractor it recommends. If you agree, check the contractor's references and don't sign any paperwork approving payment until repairs are completed to your satisfaction.
- ▶ **WATCH FOR TROUBLE.** Some damage takes weeks to emerge. Your home's foundation may shift or settle after flooding. Ask if your insurer covers delayed damages.

## 67 Running a generator? Safety tips

If your power is out for an extended period and you must use a generator to run necessary appliances, take these precautions to avoid accident or injury:

### Operate generators outdoors.

Keep them 15 feet away from the house, never in a basement or garage, to help prevent carbon-monoxide poisoning.

### Never connect a generator directly to your home.

Instead, install a transfer switch to connect the unit to your home's wiring system.

### Reduce fire risk.

Turn off gasoline-powered generators before refueling them.

### Store gasoline properly.

Use an ANSI-approved container and put it in a cool, well-ventilated area. Also, add a stabilizer to preserve it for up to one year.

## 68 How to keep mold from taking hold

If your insurance policy doesn't cover you for mold damage, you may be able to handle the cleanup yourself (if mold covers less than 10 square feet):

### Look around.

Check beneath carpets and around windows, and use a flashlight to peer behind walls and wallpaper.

### Protect yourself.

Wear an N-95 disposable respirator approved by the National Institute of Occupational Safety and Health; goggles; and heavy-duty rubber, neoprene, or PVC gloves.

### Bag and discard soiled items.

This includes any carpet, ceiling tiles, wallboard, paper, insulation, or other porous materials that have been wet for 48 hours or more. They promote mold growth even if they aren't visibly contaminated.

### Scrub other materials.

Use a strong solution of detergent and water or 1 cup of chlorine bleach per 5 gallons of water. Be sure to wear plastic or rubber gloves and eye protection.

### Wire scrub wood studs.

Exposed joists may have to be wire-scrubbed with bleach,



sanded, and dried out before reinstalling wallboard and flooring.

### Consult the EPA.

Check the agency's mold fact sheet ([www.epa.gov](http://www.epa.gov)) and the National Centers for Disease Control and Prevention's mold prevention and remediation materials ([www.cdc.gov](http://www.cdc.gov)).

## 69 Finding a mold clean-up pro

If your home was flooded and you can't seem to rid rooms of mold, you'll need a qualified mold remediation professional. What to do:

- ▶ **Contact** your state or local environmental protection or public-health department, or the Federal Emergency Management Agency field office for cleanup guidelines and resources.
- ▶ **Call** professional organizations for referrals, such as the American Industrial Hygiene Association ([www.aiha.org](http://www.aiha.org)), the American Conference of Governmental Industrial Hygienists ([www.acgih.org](http://www.acgih.org)), and the Association of Specialists in Cleaning & Restoration ([www.ascr.org](http://www.ascr.org)).
- ▶ **Request** cleanup estimates. Professional mold cleanup can cost anywhere from \$6 to \$20 per square foot in the Gulf region most affected by the recent hurricanes, and as much as \$20 to \$40 per square foot in the southern Florida.
- ▶ **Get three references.**
- ▶ **Check with your local Better Business Bureau**, state consumer-affairs department, or attorney general's office for complaints.
- ▶ **Get a detailed contract.** Don't allow work to start without one.

## 70 How to keep mold from rebounding

Once mold is removed, it can return if surfaces are not properly treated. What to do:

**Allow** all surfaces to thoroughly air-dry.

**Vacuum** up debris and particles using a wet-dry shop vac with a HEPA filter.

**Decontaminate clothing.** Wash it in hot water with detergent. Bag in plastic and discard all used masks and dirty materials.

**Install** outside-venting exhaust fans. Put them in bathrooms and dehumidifiers in basements.

**Avoid** using wallpaper or carpets in bathrooms. Also keep them out of other damp areas.

**Leave** flood-prone basements unfinished. Finished basements can be more susceptible to mold problems.

## 71 Take advantage of your tax breaks

Special federal and state tax-law provisions grant financial relief to people who live in regions declared official disaster areas. What to do:

**Consult your tax preparer** or visit [www.irs.gov](http://www.irs.gov) and type "tax relief in disaster situations" into the search engine. The site provides links to a disaster tax relief overview, states' news releases, and a FEMA list of federally declared disaster areas.

**Speed up an IRS refund** if you live in an official disaster area by filing an amended tax return for the previous year claiming losses.

## 72 Ding-dong. Who's there? Scammers

While most contractors are honest, disasters tend to attract a high proportion of scam artists. What to do:

- ▶ **TRICK.** Beware of repair companies that go door-to-door offering to make repairs or clear fallen trees. Many start jobs and won't finish until excessive payments are made. Also tree removal may be a free service provided by FEMA.
- ▶ **TRAP.** Watch out for contractors who aren't able to provide a business license or proof of insurance
- ▶ **TRICK.** Beware of contractors who cannot provide references from recently completed jobs.
- ▶ **TRICK.** Steer clear when a low price is offered to provide work or services and the entire amount or a significant portion is requested before starting the job.

- ▶ **TRAP.** Be wary when promises are made to speed up the insurance or building-permit process.

### 73 How to hire an honest contractor

When you need to hire a contractor to repair home damage after a disaster, don't let wishful thinking guide you. Steps to take:

- Get a written estimate.** Compare services and prices before making a final decision.
- Check the license.** Make sure the contractor is licensed to do business in your state. Check with your local government for permit requirements and confirm with the contractor who is responsible for paying for permits.
- Check for insurance.** Contractors should carry general liability insurance and workers' compensation.
- Call references.** Reputable contractors will be happy to provide names and contact information for satisfied customers.
- Get a contract.** A written contract will specify what will be done to complete the job, associated costs and the payment schedule. Never sign a blank contract or one with blank spaces.
- Pay by check.** Write it out to the contracting company rather than to an individual. A reasonable down payment is 30 percent of the total project cost to be paid upon initial delivery of materials.
- Make final payments** when the work is completed to your satisfaction—and not before. A reputable contractor will not threaten you or pressure you to sign documents if the job is not finished properly.
- Report problems** or fraud to your state's office of the state attorney.
- Get help.** Gulf Coast residents who live in Louisiana, Mississippi, Alabama or Florida can visit the Disaster Contractors Network ([www.dcnonline.org](http://www.dcnonline.org), choose a state and click on "search

resources" for contractors in your area), a virtual organization of construction related associations, state and federal emergency management organizations and regulatory agencies.

### 74 Protect yourself from identity fraud

Sadly, disaster areas tend to attract a high proportion of scam artists. As a result, your odds of becoming an identity-fraud victim are much higher. How to verify that your identity has not been stolen:

#### Order copies of your credit report.

Get one from each of the three major credit-reporting agencies. They are: Equifax, 800-997-2493; TransUnion, 800-888-4213; and Experian, 888-397-3742. Look for errors and report them promptly in writing.

#### Review monthly statements.

Check banking, brokerage, and credit-card statements for accuracy. Report problems immediately.

#### Avoid giving out vital information.

This includes your Social Security number, birth date, or mother's maiden name unless you initiated the transaction.

#### Shred sensitive files and mail.

This includes mail with Social Security numbers, account numbers, and birth dates. Destroy CDs or floppy disks containing sensitive data.

#### Avoid private or unfamiliar ATMs.

### 75 See if you qualify for federal aid

If you live in an area that was hit by a disaster, there's a good chance you're eligible for federal relief. The FEMA.gov web site ([www.fema.gov/assistance/index.shtm](http://www.fema.gov/assistance/index.shtm)) provides easy-to-understand information about disaster assistance—including steps to take before you apply, how to apply, what to expect after you apply, and links to special loans and other agencies that provide assistance.

## 24 KEY DISASTER-PROTECTION TIPS

The following to-do list summarizes the major safety and protection tips outlined in this CONSUMER REPORTS guide:

### Before a crisis

- Review and update insurance policies
- Create an inventory of possessions
- Review your home's exterior and interior
- Draw up a family emergency plan
- Identify safe rooms; stock up your pantry
- Prepare three emergency "dash kits"
- Map an evacuation plan and drive the route
- Buy a tone-alert radio to monitor hazards

### During a crisis

- Listen for weather watches and warnings
- Fortify your house and check if utilities should be turned off
- Know how to react when disasters strike
- Review evacuation routes and destination directions
- Contact your destination host or hotel
- Pack car with kits and evacuation supplies
- Evacuate early—or when ordered to do so
- Avoid contact with wires and water

### After a crisis

- Inspect your home cautiously
- Contact your insurance agent or insurer

- Photograph all home damage before repairing
- Fix only to halt further damage prior to adjuster's arrival
- Avoid contractor scams and insurer errors
- Negotiate the best possible claims settlement
- File for qualifying disaster tax breaks
- See if you qualify for federal aid

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