



# Emergency Operations Bureau

## 2022 Severe Weather Season

### Personal & Family Planning Guide

Time to prepare



Hurricane



Tornados



Tropical Storms

# GLOSSARY OF WEATHER TERMS

**Eye** – The roughly circular area of comparatively light winds that encompasses the center of a severe tropical cyclone. The eye is either completely or partially surrounded by the eyewall cloud.

**Flood** – Any high flow, overflow, or inundation by water which causes or threatens damage and/or threatens human life.

**Hurricane** – A tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 74 mph or more. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline.

**Hurricane Season** – The portion of the year having a relatively high incidence of hurricanes. The hurricane season in the Atlantic, Caribbean, and Gulf of Mexico runs from June 1 to November 30. The hurricane season in the Eastern Pacific basin runs from May 15 to November 30. The hurricane season in the Central Pacific basin runs from June 1 to November 30.

**Hurricane Watch** – Hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified area. Because hurricane preparedness activities become dangerous once winds reach tropical storm-force (sustained winds of 39 to 73 mph), a hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds. During a hurricane watch, prepare your home and follow instructions from local officials. If you live in an evacuation zone for storm surge, you might be told to prepare your home and evacuate even before or without a hurricane watch.

**Hurricane Warning** – Hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area. Because hurricane preparedness activities become dangerous once winds reach tropical-storm-force (sustained winds of 39 to 73 mph), the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. During a hurricane warning, rush preparations to completion, follow instructions from local officials, and take shelter where you will stay during the storm. If you live in an evacuation zone for storm surge, you might be told to prepare your homeland evacuate even before or without a hurricane warning.

**Saffir-Simpson Hurricane Wind Scale** – The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The following table shows the scale broken down by winds:

Category Wind Speed (mph) Damage

Category	Wind Speed (mph)	Damage
1	74-95	Very dangerous winds will produce some damage
2	96-110	Extremely dangerous winds will cause extensive damage
3	111-129	Devastating damage will occur
4	130-156	Catastrophic damage will occur
5	>157	Catastrophic damage will occur

**Storm Surge** – An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and the level that would have occurred in the absence of the cyclone. Storm surge is usually estimated by subtracting the normal or astronomic high tide from the observed storm tide.

**Storm Surge Watch** – The possibility of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 48 hours, in association with an ongoing or potential tropical cyclone, a subtropical cyclone or a post-tropical cyclone. The watch may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The watch may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas. Prepare your home and follow instructions from local officials, and evacuate if and when told to do so. In some cases, you may be told to prepare your home and evacuate even before the issuance of a storm surge watch.

**Storm Surge Warning** – The danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours, in association with an ongoing or potential tropical cyclone, a subtropical cyclone or a post-tropical cyclone. The warning may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening inundation but which could potentially be isolated by inundation in adjacent areas. Rush preparations to completion, follow instructions from local officials, evacuate if and when told to do so, and take shelter where you will stay during the storm. In some cases, you may be told to prepare your home and evacuate even before the issuance of a storm surge warning or watch.

**Tropical Depression** – A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 38 mph or less.

**Tropical Storm** – A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 39 mph to 73 mph.

## Time to prepare



# Family Hurricane Preparedness Guide



This Family Hurricane Preparedness Guide will provide information to help you, your family, and your community prepare for hurricane season following the five key messages.

We encourage everyone to be prepared before a disaster strikes, and this guide can serve as a helpful tool in your preparations.

Determine if you live in a storm surge evacuation zone. If you do, decide today where you would go and how you would get there. If not and you live in a safe home outside of flood-prone areas, identify a friend or family member in an evacuation zone and be their evacuation destination. Residents of mobile homes, that are not safe even in winds of tropical storm-force, should also plan for evacuation. If a hurricane threatens your area, having a plan in place can reduce fear, reduce anxiety, and allow for safely sheltering in place or efficient and safe evacuation. Remember to always listen to instructions given by your local authorities.

## Prior to evacuation, remember to:

- Maintain a full tank of gas;
- Bring identification, insurance papers, and other important documents for every family member;
- Bring adequate water, snacks, cash, medications, masks, hand sanitizer;
- Obey all special traffic signs and law enforcement orders;
- Move disabled vehicles from travel lanes; and
- Only dial 9-1-1 if there is a life-threatening emergency.

## #1 Personal Safety- Know Your Evacuation Zone

View the annual hurricane evacuation zone survey. This survey contains available resources on local evacuation zones and storm surge mapping for your city, county,

**Evacuees should be prepared for the following:**

- Extremely heavy traffic with slow highway speeds; residents in highly vulnerable areas should leave the area sooner rather than later; and
- Limited access to gas stations, restaurants, and restroom facilities

**Know your evacuation zones: For further information on PBC visit:**

<https://discover.pbcgov.org/publicsafety/dem/Pages/Know-Your-Zone.aspx>

The screenshot displays the 'Know Your Zone' section of the PBC website. It features two main maps: 'Evacuation Zone' (top left) and 'Flood Zone' (top right). Below the maps are two search tools: 'Hurricane Evacuation Zone Look-up Tool' (left) and 'Flood Zone Look-up Tool' (right). The 'Hurricane Evacuation Zone Look-up Tool' includes a search bar, address input, and a map showing evacuation zones. The 'Flood Zone Look-up Tool' also includes a search bar, address input, and a map showing flood zones. At the bottom, there are sections for 'CONTACT US', 'ALERTPBC', and 'PBC DART APP'.

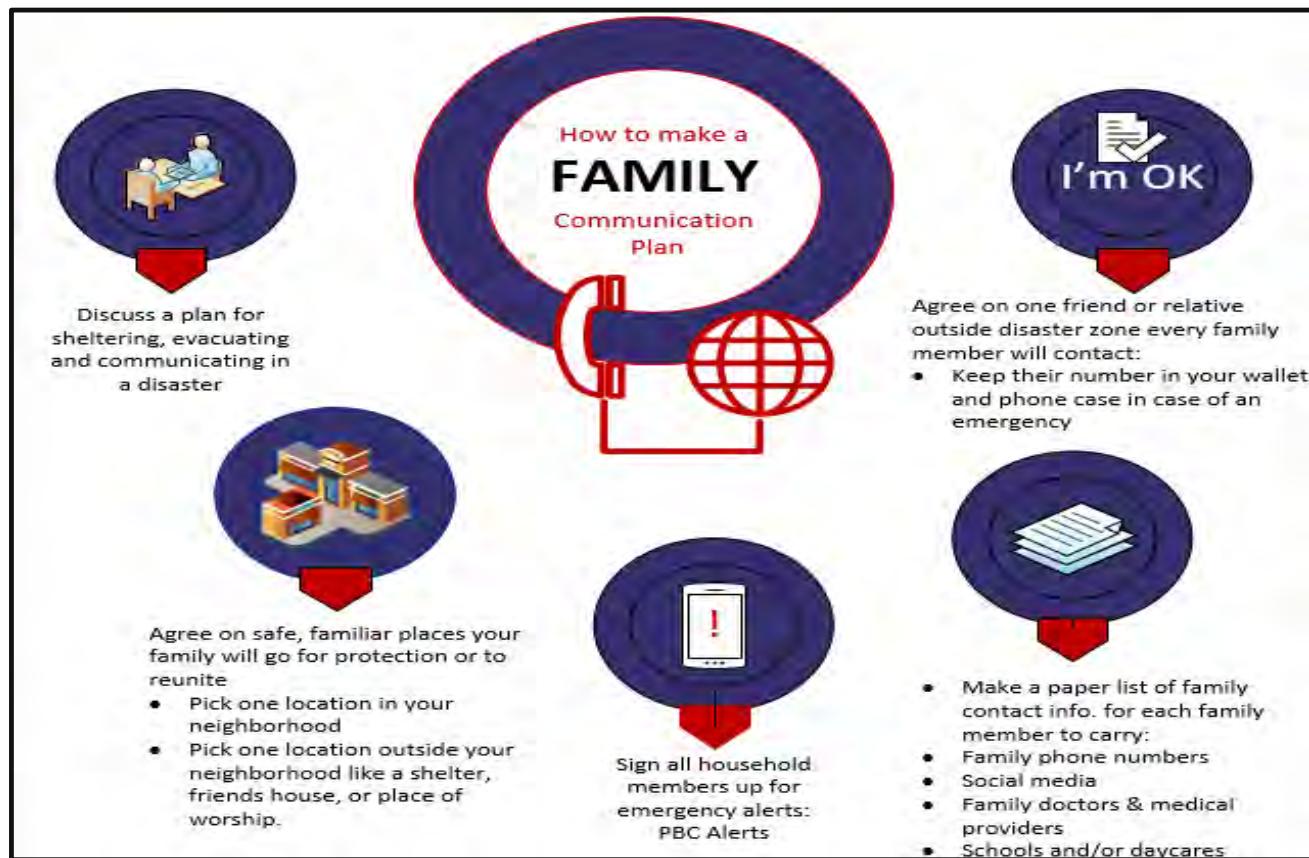
**Contact Us:**  
20 S. Military Trail  
West Palm Beach, 33415  
(866) 722-2000  
Fax Number: (561) 722-0664  
TDD/TTY: 561.722.6362  
Deaf/Blind: 1.800.532.3333

**ALERTPBC:**  
High-Speed Hearing & Emergency Notification System

**PBC DART APP:**  
Click and download app store  
Available on Google Play and App Store

## #2 Family Preparedness

### Create a Communications Plan



Electricity will likely be disrupted and communication networks such as cell phones, computers, landline telephones, and the Internet may be affected during a disaster.

Having a family communications plan in place in ahead of the disaster can help ensure that everyone knows how to connect and where to meet during an emergency.

#### Use this checklist to complete your family communications plan today!

- Write down or capture telephone numbers and email addresses for everyone in your household. If you have children that do not have a cell phone, record the telephone number and email address for their school and/or daycare provider.
- Write down or capture telephone numbers for emergency services, utility provider, medical providers, homeowners insurance company, automobile insurance company, veterinarian, and any other service providers that you may need to contact.
- Become familiar with the disaster plans for your children's school and their communication methods as a disaster can strike during school and/or work hours. Remember to discuss these plans with your children.

- Identify a family member or friend to serve as an out-of-state contact so all family members have a single point of contact. Write down or capture two contact methods for this individual such as telephone, cell phone, e-mail address, or social media. Determine safe places where your family can go for protection or to reconnect if separated. Be sure these locations are accessible, and if you have pets, identify animal-friendly locations. Identify the following locations

**Indoors:** If you do not have a tornado safe room or storm shelter, the safest place may be a small, interior, windowless room such as a closet or bathroom on the lowest level of the structure.

**In your neighborhood:** This is often where your family can meet if there is an emergency and you need to leave your home. This could be a big tree, a mailbox at the end of your driveway, or a neighbor's house.

Once created, make sure everyone receives a copy of the family communications plan. Store copies of the plan in your purse, backpack, or cell phone. Remember to post a copy of your plan in a central location in your home such as the refrigerator or family bulletin board.

**□ Don't forget to practice your plan!**

## Here are a few reminders and tips:

- Learn your family's social media handles, and consider signing up for social media applications such as Facebook Safety Check, American Red Cross Safe and Well, and Google Person Finder
- Remember, texting may work best before, during, and after a disaster as a text message may be more likely to reach the recipient as it requires far less bandwidth to send than making a phone call.
- Store at least one emergency contact under the names "In Case of Emergency" or "ICE" for all cell phones and devices. This will help someone identify your emergency contact if needed. Be sure to inform your emergency contact of any medical issues that you or your family members may have, and explore new tools such as the Medical ID option on Apple devices.
- To show why it is important to keep phone numbers written down, challenge your family members to recite important phone numbers from memory.
- Make sure that everyone, including children, knows how and when to call 9-1-1 for emergency help. Remember, only call 9-1-1 if there is a life-threatening emergency.
- Conserve your cell phone battery by reducing the brightness of your screen, placing your phone in "airplane" mode, and closing unnecessary apps that you do not need.





## #2 Family Preparedness

### Create a Disaster Supply Kit

In the event of a home emergency or natural disaster, what will your family need to survive for a day? For multiple days? For a week? Now, assuming you have all of those items in your house, how long do you think it would take to go through the house and gather them up? Unfortunately, in an emergency like severe weather...you might not have that much time, which is why a Disaster Supply Kit is critical for Family Emergency Preparedness. Here are the absolute basics every disaster supply kit should contain.

- Water, one gallon of water per person per day for at least three and preferably seven days, for drinking. You should also plan for emergency sanitation that conserves water since this water supply is primarily for drinking. Water needs vary depending on age, physical condition, activity, diet, and climate
- Food. At least a 3-day and preferably a seven-day supply of non-perishable food. Remember that some foods require water for preparation
- Battery-powered or hand crank radio and a NOAA Weather Radio All Hazards with tone alert with extra batteries
- Smartphone weather alerting apps to ensure redundant alerting capacity
- Flashlight and extra batteries
- First aid kit
- Whistle, to signal for help
- Dust mask, to help filter contaminated air, and plastic sheeting and duct tape to shelter in place from a chemical incident and airborne chemicals outside
- Moist wipes, garbage bags, and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Masks, hand sanitizer, disinfecting wipes, and spray
- Manual (not electric) can opener for food
- Local maps
- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification, and bank account records in a waterproof and fireproof portable container
  - Cash and change 
  - Sleeping bag or warm blanket
- Complete change of clothing including a long-sleeved shirt, long pants, and sturdy shoes. You may need additional clothing if you live in a cold-weather climate.
- Water purification system and/or household chlorine bleach and medicine dropper
- Fire extinguisher
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plastic plates and utensils, and paper towels
- Paper and pencil
- Books, games, puzzles, or other activities for children

# Checklist

Consider what items are needed to meet your unique family needs, including how many family members you have, age, diet, health, mobility, as well as the conditions in your location (cold climate, hot climate, etc.). Prepare separate, sets of emergency supplies for your vehicle and workplace that can last at least 24 hours as you may not know where you will be when an emergency occurs, and always include essential medications.

- Home: Keep this kit in a designated place and have it ready in case you have to leave your home quickly. Make sure all family members know where the kit is kept.
- Work: Be prepared to shelter at work for at least 24 hours. Your work kit should include food, water, and other necessities like medicines, as well as comfortable walking shoes, stored in a “grab and go” case.
- Vehicle: Keep a kit of emergency supplies in your car in case you are stranded.



**Build your kit**

**DIY Inspection**

**Emergency Board Up**

**Evacuation Zones**

**Flood & Hurricane Home Retrofit Options**

**Flooding; lower pools; check flood zone**

**Home Inventory**

**Insurance Checkup**

**Outdoor Inventory**

**Lightening**

**Landscaping**

**Power Outage & Generators**

**Protect Pets**

**Sandbags**

**Shutter Options**

**Strengthen Garage Doors**

**Strengthen Gutters**

**Strengthen Roof**

**Strengthen Soffits**

**Understanding your Building Codes**

## #3 Financial Security



Understanding your insurance needs is an essential preparation step for you and your family. Getting the right type and amount of insurance can help you recover more quickly from disaster and avoid years of financial challenges.

Take steps today to identify and secure the right insurance policy(s) and safeguard your future financial health.

Many different lines of insurance are available to cover different types of disasters. A homeowners' insurance policy generally provides the following areas of coverage:

- Dwelling - coverage for your house;
- Other structures - coverage for structures such as garages, decks, and fences;
- Personal property - coverage for items such as furniture, clothing, and appliances;
- Loss of Use - compensation if you need to relocate temporarily due to covered damage;
- Personal liability - coverage for accidents occurring on your property; and
- Medical protection - payments for a person who is injured on your property



Most landlords and professional property management companies will require proof of renters' insurance when a lease is signed. Renters' insurance policies can include the following coverage types:

- Personal property - coverage for items such as furniture and clothing;
- Loss of Use - compensation if you need to relocate temporarily due to damage;
- Personal liability - coverage if sued due to accidental injury to others;
- Medical protection - payments for a person who is injured on your property; and
- Property damage to others - coverage if you accidentally break or damage someone else's property.

The insurance industry identifies the cause of loss, such as fire or theft, as a "peril." Insurance only applies when the covered peril (i.e., hazard) that caused the loss is part of a policy. Be sure to check your policy to determine which perils (hazards) are covered. A homeowners' insurance policy may provide coverage for different perils for the dwelling and for personal property. The policy may also have different deductibles based on the peril. Always check your individual policy for details.



If it can rain where you live, it can flood where you live, and if you live in a hurricane evacuation zone, you are also at risk from saltwater flooding. Losses caused by flood may not be covered by standard property insurance policies. Tell your insurance professional that you need flood insurance coverage, even if you are not in the highest-risk areas for flooding or mudflows, including flooding caused by hurricanes. Flood insurance coverage may be purchased through the National Flood Insurance Program. Coverage for other hazards, such as mold, may be provided as part of the basic property insurance, but the amount of loss payable under the policy may be limited.

Contact your state insurance department for referrals or information on what coverage is available from your state's involuntary market, shared market, or a state-backed plan if you are unable to find an insurance company that offers a policy that meets your needs.

Contact your insurance company or professional agent every year for an insurance check-up to ensure your coverages keep pace with your needs, belongings, and the perils you face.

Create and maintain a current home inventory to help determine the correct amount of insurance to purchase before the disaster to support the claims process afterward. Have your current home inventory available to determine the right amount of insurance.

Review whether property insurance policies cover actual cash value or replacement cost. Be sure you understand deductibles, waiting periods before coverage begins, and procedures for notification of insurers when a loss occurs.

Ask your insurance professional about potential discounts, incentives, or other savings available on the cost of your policy. Some insurers offer discounts for the following:

- Purchase home/renter's and auto insurance from the same provider
- Installing smoke detectors, burglar alarms, sprinklers, or other improvements, such as hurricane shutters or reinforced roofing, or other hazard mitigation devices;

Maintain a detailed inventory of your belongings to help make the claims process efficient and swift. Photograph and keep records and receipts for all of your belongings. Remember, you may be entitled to tax credits or deductions for casualty losses, so documentation is essential.

Take photos or videos to record your belongings for your home inventory, but also write down descriptions, including year, make, and model numbers. Take photos or a video of the interior and exterior of your home as well. Store your inventory on a portable computer drive (e.g., CD, flash drive, or external hard drive), in online remote storage (known as "the cloud"), in an electronic file, or write it down on paper. Keep your inventory in a location away from your home where it can be accessed easily after a disaster.

Store insurance policies, deeds, property records, and other important papers in a safe place, such as a waterproof and fireproof box, safe, or bank deposit box. Also, make copies of important documents to include with your disaster supplies and consider storing electronic copies on the cloud. Always use strong passwords that include letters and characters. Keep your insurance policy number(s), your insurance professional/company phone number, and claim filing instructions in a secure, convenient location.

## #4 Damage Prevention

Preparing your home for hurricanes can mean the difference between minor damage and complete destruction. Strengthening your home to withstand high winds can be as easy as the ABCs.

### Anchor

- Bring anything from the yard that could become windborne inside and ask neighbors to do the same.
- Replace gravel/rock-landscaping material with fire treated, shredded bark, or other lightweight mulch to eliminate the potential for windborne missiles.
- Trim and anchor down trees and foliage.
- Strengthen your soffits by applying a bead of polyurethane sealant between the wall and the trim into which the soffit panels are inserted.
- Secure an inspection to make sure your home has wall-to-foundation (anchor bolts/rebar) connections.

### Brace

- Bolt all doors with foot and head bolts with a minimum of one-inch bolt throw length
- Reinforce the garage door and tracks
- Brace all gable and walls with horizontal and/diagonal braces

In addition to flood insurance, there are many steps you can take to minimize flood damage, including elevating electrical outlets, anchoring fuel tanks, installing a floating drain, and elevating appliances inside and outside.

Keep your gutters and downspouts clear of debris, so they can carry rainfall and storm water away from your foundation. If flooding is imminent, you should secure sandbags. If they are properly filled, placed, and maintained, sandbags can redirect storm water and debris flows away from a home and other structures.

### Cover

- Cover all large windows and doors, especially patio doors with securely fastened, tested and approved impact-resistant shutters with proper mounting hardware, or replace them with impact-resistant, window and door systems if feasible
- Make sure all doors and windows are properly caulked and/or weatherstripped to reduce potential water intrusion
- Install a roof covering that is rated for high wind and impact from hail or debris

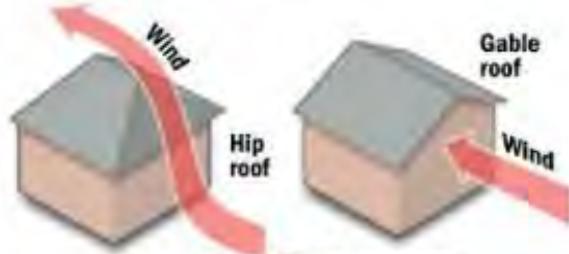
### Strap

- Tie down any free-standing fixtures in your yard
- Fasten rafters/trusses to walls with hurricane straps/clips

# Inspect your home now

## What kind of roof do you have?

Homes with gabled roofs are more likely to suffer hurricane damage than homes with hip roofs because winds push into the flat ends of gabled roofs but pass over the steep pitch of hip roofs.



## Check the nails and hurricane straps

Hurricane straps help hold the roof to the walls. In the attic, inspect for straps of galvanized metal. Go in the attic and see how well the roof sheathing, often plywood, is attached. If most of the large nails or staples coming through the sheathing have missed the trusses, your roof sheathing is improperly installed. This was a big problem during Hurricane Andrew.

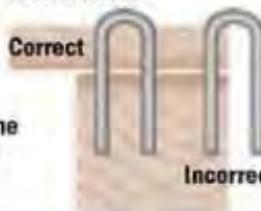
**Correct**



**Incorrect**

When nails or staples miss the truss, the roof is weakened.

**Correct**



## Shingles or tiles

Replace damaged or missing tiles or asphalt shingles.

## Look for loose rain gutters and shutters.

## Nailing the plywood

Resin-coated nails should be spaced 6-inches apart when attaching plywood to trusses.

## Remove turbines

Buy caps for your roof turbines so when the storm threatens you can remove the turbine and cap the hole. Winds of more than 100 mph will pull turbines off, leaving a hole for rain and wind to enter your attic. Also buy caps for any removable vent pipe that protrudes from the roof.

## Garage door

If your garage door isn't made with hurricane-resistant panels, reinforce it by screwing vertical support bars to the door ribs and anchoring the bars at the bottom and top. If you add horizontal braces instead, check that the door tracks have enough anchor bolts.

## Doors

Make sure your door hardware is in good condition. Add deadbolts, top and bottom, for each door leaf, to keep the door from blowing inward or outward.

## Trim trees

Cut overgrown limbs so they won't damage your home. Use shredded bark for ground cover instead of gravel.

## Potential missiles

Move possible projectiles indoors to prevent damage or injury.

## Hurricane shutters

Inspect your hurricane shutters for damage or missing fasteners. Practice putting them up.

## Boats

Secure your boat in the garage, marina or boat storage facility.





## Generator Safety Tips



### How to choose a generator

1. Add up the power requirements of the appliance and devices you will want to use. ( check the back and sides of appliances for labels with this info)
2. Add up the wattage of all the light bulbs you will want to use
3. Find the total amps you need by dividing watts by volts
4. Choose a generator that produces more amps than you need- because some machines draw up to 3 times as much power when starting up, and others lose efficiency over time. The best option is a permanently –installed generator

### Safety tips

- Avoid using in enclosed spaces- carbon monoxide and harmful gases are omitted
- Place the power cords carefully-tripping hazard. Examine for damage, cuts, and abrasions
- Take care of your generator (conduct routine maintenance and checks)
- Cover your generator- moisture is the greatest enemy of your generator
- Do not overload generator- can lead to overheating, short circuit, blown fuses, and fire
- Protect from shocks and electrocution – never attach system directly to your electrical mains connection. Always use a transfer switch in between.
- Refueling hazard- Never refuel when the appliance is hot. It could cause fires. Use proper fuel and don't place flammable materials near generator.
- Test are smoke and carbon monoxide detectors
- Ensure batter is charged and not corroded
- Visually inspect hoses, fittings and connections to check for leaks and ill-fitting points of contact
- Address any unusual noises, vibrations or alerts that occur while the generator is running
- Inspect other external equipment including the fire extinguisher, first aid kit, manuals and maintenance log

## FOR MORE INFORMATION

Emergency .....	911	Public Affairs Department .....	561-355-2754
Public Safety .....	561-712-6400	Public Works .....	561-684-4000
TDD (hearing impaired) .....	561-712-6343	Roads, Drainage, Traffic .....	561-684-4018
Senior Helpline.....	211	Salvation Army .....	561-686-3530
Animal Care & Control.....	561-233-1200	Sheriff (PBSO) Non-Emergent .....	561-688-3000
American Red Cross .....	561-833-7711	Solid Waste Authority .....	561-640-4000
Code Enforcement .....	561-233-5500	United Way.....	561-375-6600
Consumer Affairs .....	561-712-6600	PBC Water Utilities .....	561-493-6000
FEMA .....	800-621-3362		
Fire Rescue Non-Emergent .....	561-616-7000		
FPL Power Outages .....	561-697-8000		
Palm Tran.....	561-841-4200		
Price Gouging Hotlines .....	866-966-7226		

Palm Beach County Emergency Management

<http://discover.pbcgov.org/publicsafety/PDF/Hurricane-Guide.pdf>

PBC Shelter Registration:

<http://discover.pbcgov.org/publicsafety/dem/Pages/Shelters.aspx>

PBC Special Needs Shelter pre-registration:

<http://discover.pbcgov.org/publicsafety/dem/Pages/Special-Needs.aspx>

FEMA Disaster Recovery Center (DRC)

<https://www.disasterassistance.gov/get-assistance/forms-of-assistance/4627>

Blue Roof ProgramUS Army Corp of Engineers

1-888-766-3258 (provides homeowners with free temporary roof coverings for eligible homes)

Alert PBCPalm Beach County's Emergency Notification

<https://member.everbridge.net/index/892807736726195#/signup>



Registering for ALERTPBC allows PBC to alert you of public safety issues in your community such as hazardous weather conditions and municipal alerts. When a notification about a potential safety hazard or concern, you will receive a message on the voice or text communication methods that you have registered