

HURRICANE PREPARATION FOR BUSINESSES

General Hurricane Preparations Provided by FEMA

All business owners and managers should develop a basic hurricane awareness. Suggested pre-hurricane season planning activities are outlined below.

A. Employee Preparation

1. Determine which members of your staff you will need to carry out hurricane preparations and who you can reasonably expect to be available. Some employees may need to assist their own families or relatives in evacuating from threatened areas. You will probably need all of your building maintenance staff to prepare your facility for a hurricane. Regularly update your list of employee phone numbers and ensure each department head has a copy.
2. Develop a simple **written plan** which incorporates a set of Hurricane Task Assignments for your staff. Inputs regarding the tasks to be accomplished should be solicited from all of the various work centers at your facility.
 - a. Outline the specific tasks which must be performed to protect your facility during a hurricane watch and a hurricane warning, how they will be accomplished, and who will perform them.
 - b. It is probably desirable to develop teams for many tasks – a team to board up, a team to secure exterior equipment, and so forth. Staff members who will be performing unfamiliar tasks may need some instruction in these tasks and the use of any equipment that may be required to accomplish those tasks.
3. Outline your hurricane response plan and task assignments at a training session. Familiarization training should be conducted at the beginning of every hurricane season – and during the season if there is high staff turnover. Update team assignments on a regular basis.

B. Facility Preparation

1. If your facility is in a storm surge inundation zone or appears to be unsafe for occupancy during high winds, you may have to completely evacuate it. Identify essential business records that should be removed from the facility and determine where you plan to take them. Back up computer records on disk or tape and move these with other essential records.
2. Review your list of major equipment and furnishings to determine which items need to be protected or removed and record how you plan to do it. The basic choice is to try to protect your equipment and furnishings in-place or move them out of the area which is at risk. In either case, determine what equipment and manpower will be needed to relocate these items. If you plan to protect equipment in-place, move it to well-protected interior rooms on floors above the level of potential flooding.

HURRICANE PREPARATION FOR BUSINESSES

3. Identify outside equipment and furnishings which could be blown loose and may become deadly missiles in hurricane winds. Determine where they will be stored or how they will be secured in-place. Among the items to be secured are any available outside merchandise, trash cans, signs, awnings, antennas and tools.
4. Strongly anchor any portable storage buildings.
5. Ensure rooftop equipment such as exhaust fans, wind turbines, and air conditioning units are securely fastened or strapped down to the roof deck.
6. If the roof is a composition roof with a gravel covering, remove loose gravel to preclude damage to unprotected windows by stones being blown off of the roof.
7. Ensure that members of your staff know how to turn off the electrical power, water, gas, and other utility services within your building at main switches.

C. Equipment

1. Obtain several battery-operated radios and spare batteries to ensure you can receive emergency information. It is desirable to have at least one radio on site which can receive [National Oceanic & Atmospheric Administration](#) (NOAA) weather radio frequencies. Weather radios with a tone alert capability are a very effective way of receiving reports of significant changes in weather conditions.
2. Procure sufficient flashlights and other battery powered lights to allow essential work to be conducted in the event of power outage. Ensure a good supply of fresh batteries are on hand throughout the hurricane season.
3. Compile a disaster supply kit and have this ready for emergencies with contents such as: food, (canned goods, non-perishable, ready to eat), water (one gallon per person per day), manual can opener and other eating utensils, personal hygiene items such as soap, deodorant, shampoo, toothbrush and toothpaste, toilet paper, first aid kit, and manual, fire protection equipment or fire extinguisher, rainwear, gloves, and blankets.
4. If you do not have storm shutters, ensure you have the necessary tools to board up windows and brace doors. The first priority in protecting your facility will be to keep the wind out. Wind pressure and windblown debris can break windows and blow in doors. Sliding glass doors, large picture windows, skylights, French doors, inward opening double doors, and garage doors are particularly vulnerable. Such tools as a circular or hand saw, a drill with appropriate bits, a hammer or nail gun, hand or power-driven screwdriver, and a wrench may be needed. Nails will be sufficient on wood-framed windows and doors but screws or bolts and washers are necessary for metal-framed windows and doors.
5. Have an ample supply of brooms, squeegees, mops, and absorbents to remove water.

HURRICANE PREPARATION FOR BUSINESSES

6. A small emergency generator could be useful. The power may go out before a hurricane comes ashore and may be out for an extended period. An emergency generator could provide the capability to maintain lighting, recharge battery powered equipment, and power pumps and tools which may be needed for expedient repairs after the hurricane passes.

D. Recommended Supplies

1. Plywood (preferably 5/8 inch thick exterior type) to cover large windows and glass doors which can be blown in by hurricane force winds. If possible, obtain plywood before hurricane season begins and precut it to size, mark each panel to identify where it goes, and store it until needed.
2. Sufficient lumber to brace inward-opening exterior doors and roll-up doors on the inside. Boards should be 2 x 4's or larger.
3. Waterproof tape (duct tape or filament tape) to help protect the smaller windows in your facility from powerful wind gusts and flying debris. Apply tape in a criss-cross pattern.
4. Tie-down material (rope or chain) for outside furnishings and equipment that can't be moved.
5. Heavy duty plastic sheeting (4 mil thickness or greater), furring strips, and a nail or staple gun to be used to make expedient roof and window repairs. Plastic sheeting can also be used to cover and protect equipment in the event of roof damage or leaks.
6. A supply of sandbags may be helpful in preventing intrusion of water through doorways into low-lying sections of buildings. Sandbagging can be very time consuming. It takes two people about an hour to fill and place 100 sandbags creating a wall only a foot high and 20 feet long.
7. It is suggested that you stockpile the emergency supplies needed during the hurricane season. Many of the listed items rapidly disappear from retail outlets

WHEN A HURRICANE WATCH IS ISSUED

A hurricane watch is issued by the National Weather Service when hurricane conditions pose a possible threat to coastal areas.

- A. Implement Precautionary Activities. Refer to your Hurricane Task Assignments for a hurricane watch and begin your pre-planned activities to prepare the facility and staff for the threat of a hurricane.
- B. Suggested Actions
 1. Monitor radio and television newscasts for further information.
 2. Check and verify adequacy of essential emergency equipment and supplies.

HURRICANE PREPARATION FOR BUSINESSES

3. Begin to secure or store exterior equipment.
4. Assemble equipment and materials to protect windows and other glass by boarding up or taping, and to protect vulnerable doors by bracing.
5. Fill vehicle fuel tanks and obtain fuel for the emergency generator, if you have one. Fuel may not be available during hurricane evacuation activities.
6. Begin storing water in containers for emergency use or obtain supplies of bottled or canned water.
7. Update your list of all business records that may need to be removed or protected, and computer data that will need to be backed up.

WHEN A HURRICANE WARNING IS ISSUED

A hurricane warning is issued by the National Weather Service when a hurricane is expected to make landfall in a coastal area within 24 hours. In general, businesses in evacuation zones should be evacuated promptly when hurricane warnings are issued. For businesses in hurricane contingency zones, local officials may recommend evacuation during major (Category 3 or greater) hurricanes. **Remember that hurricane evacuation routes can be closed by high winds and water many hours before a hurricane hits.**

- A. Implement Protective Actions. Refer to your hurricane task assignments for a hurricane warning and begin your pre-planned activities to protect the business and employees from the threat of a hurricane.
- B. Suggested Actions when Evacuation is Recommended. If evacuation of your area is recommended by local officials:
 1. Close the business.
 2. Relocate vital business records and valuables to a safe location out of the area being evacuated. Back up computerized records and protect the backup copy.
 3. Relocate expensive equipment out of the area or move it to the most heavily constructed interior area of the facility. In areas which could be subject to surge flooding, move equipment to floors above the possible surge level. Cover vulnerable equipment which cannot be moved with plastic sheeting to minimize damage in the event of roof leaks or broken windows.
 4. Where possible, move furnishings away from exterior windows and doors and get as many items as possible off the floor.

HURRICANE PREPARATION FOR BUSINESSES

5. Brace inward-opening exterior doors and any roll-up doors. Wedge sliding glass doors to prevent them from lifting from their tracks.
 6. Close storm shutters, if available. Close, lock, and board up those large windows and glass doors. Board up or tape over smaller windows. Lower blinds and close curtains to help hold back flying debris.
 7. Turn off electricity, gas, water, and other utility services.
 8. Ensure all personnel have departed the facility before evacuation routes become impassable due to flooding or high winds.
- C. Appropriate Action if Evacuation is not Recommended. If local officials do not recommend evacuation of your area, your facility may still experience high winds and heavy rain generated by a hurricane.
1. Take appropriate protective measures to reduce the vulnerability of wind damage and heavy rain using the checklist in paragraph B above as a guide.
 2. Have building maintenance personnel on standby and materials for expedient repairs readily available.
 3. Prepare for a possible loss of utilities for up to 72 hours. This means having battery-powered lights, a battery-powered radio, a supply of potable water, and if possible, an emergency generator.

DURING THE HURRICANE

- A. Sheltering. If your facility is not in an evacuation area but is still expected to receive some storm effects, the following guidance should be used in sheltering your staff during the passage of the storm.
1. Use interior rooms and corridors. Avoid using basements if there is a chance of flooding. Avoid sheltering people in large open rooms which do not have interior supports, such as auditoriums.
 2. In multi-story buildings, shelter people on the lower floors and avoid corner rooms.
 3. Avoid areas near exterior windows and glass doors, unless the glass is protected by shutters. Check with your company's attorney to determine potential liability before using your facility as a hurricane shelter.
- B. Other Precautions
1. Periodically conduct an internal check of buildings for roof damage, window breakage, broken pipes, and structural damage.

HURRICANE PREPARATION FOR BUSINESSES

2. Ensure that those being sheltered remain indoors during the hurricane. If the eye of the hurricane passes over your facility, do not be fooled by the period of temporary calm, which occurs. When the eye of the hurricane has passed, storm winds will return from the opposite direction.
3. Continue to monitor your radio or television for hurricane condition updates and emergency information.

AFTER THE HURRICANE

A. Reentering Evacuated Areas

1. If you evacuated your facility, you may have difficulty returning quickly because roads may be damaged, blocked by debris, or flooded in low lying areas.
2. Access to storm-damaged areas may be limited by local law enforcement personnel, to keep people out of areas with dangerous conditions, facilitate rescue and recovery work, and limit access to unoccupied properties.
3. Initially, entry to storm-damaged areas may be limited to search and rescue personnel, law enforcement personnel, firefighters, utility crews, and road clearing teams. Once it is reasonably safe, property owners and essential employees will be cleared to enter the area, but they may be required to have a permit or pass, or be included on an access list maintained by the city. Contact your local emergency management office to determine the procedures for returning to storm-damaged areas.
4. Listen to your radio or television for instructions before attempting to return to your place of business.

B. Checking your Facility

1. Look for obvious structural damage to your building and its foundations. If you see significant structural damage, don't attempt to enter the affected building.
2. Check for downed or dangling electrical power lines and broken sewer or water pipes on your property. Stay away from damaged power lines and broken sewer lines. Do not take lanterns, torches, or any kind of open flame into a damaged building – there may be leaking gas or other flammable materials present. If you see damage to power, water, or wastewater equipment, report it to your utility company.
3. Make sure the electrical outlets and appliances throughout your facility are dry and free of water before turning the power back on. If you have any doubt about the condition of wiring or appliances, have an electrician check them to make sure there are no short circuits.

- C. Secure the Site. Looting of damaged facilities is possible. Normally, the presence of the owner, employees, or security guards on the property will discourage looting.

HURRICANE PREPARATION FOR BUSINESSES

D. Safety Precautions

1. Do not drink water from your water system until local officials advise you that it is safe from contamination. Use emergency water supplies or boil tap water before drinking it.
2. Take extra precautions to prevent fire – inoperative water systems, low water pressure, and the disruption of other services may make firefighting extremely difficult.
3. Guard against spoiled food. Food in refrigerators can spoil if power is off only a few hours. Freezers will keep food safe to eat for several days if the freezer door is not opened after the power goes off. Do not refreeze food once it begins to thaw.
4. Wear sturdy shoes when walking through debris and use gloves when moving it.
5. Be aware that snakes, poisonous insects, and other animals instinctively move to higher ground to escape floodwaters. They may have taken refuge in your facility.

E. E. Recovery Activity

1. Report damage to your insurance company, as required by all policies. If your building is uninhabitable, paint insurer's name and point of contact information (your name, temporary address, and the phone number to be used) on a wall or large board so the adjuster can find you.
2. Document damage to your building and its contents with photographs or video. Do not make extensive repairs until a claims adjuster inspects the damage. However, you should try to make expedient repairs to prevent more damage or looting. For example, cover broken windows and holes in the roof or walls to prevent further weather damage.
3. If possible, be present when the insurance adjuster inspects your property.
4. Repair damage to automatic sprinkler systems as soon as possible in order to get fire protection equipment back in service.
5. Contact local building inspection officials to determine permit requirements and rebuilding guidelines after a disaster. Repair agreements should include the contractor's license number, specify a starting and ending date, and provide an exact description of the work to be performed. It is recommended that you do not fully prepay for repair work, but rather reserve some portion of payment until the work is completed. Maintain accurate records of all repairs and save receipts for repair work.