Hurricane Preparedness for Business

Hurricanes have shown us their devastating power and the costly destruction they can deliver. The Insurance Information Institute reports that hurricanes account for eight of the 10 costliest catastrophes in U.S. history.

A hurricane is a severe tropical storm that forms in the North Atlantic Ocean, the Northeast Pacific Ocean, or the South Pacific Ocean. Hurricanes need warm tropical oceans, moisture and light winds above them. If the right conditions last long enough, a hurricane can produce violent winds, incredible waves, torrential rains and floods. There are on average six Atlantic hurricanes each year; over a three-year period, approximately five hurricanes strike the United States coastline from Texas to Maine.

Hurricane season runs from June 1 to November 30. Don't get caught off guard. Advances in technology and weather tracking have made it easier to detect these storms before they make landfall. Proper preparation and action steps can help reduce damage and potential loss of life dramatically.

Steps to Take Before Hurricane Season

- Establish or review an Emergency Action Plan that considers prevention, emergency response, evacuation criterion, disaster recovery and key personnel.
- Designate an Emergency Coordinator and Emergency Action Team. Schedule meetings and drills to ensure members know their roles and responsibilities.
- Review your Emergency Action Plan with the local authorities and know your community safety plan.
- Confirm that you can receive the local NOAA radio frequency. The National Weather Service uses NOAA Weather Radio to deliver critical information and storm updates.
- Detail communication procedures for staff, vendors and clients. Maintain a current list of key contacts with telephone numbers and addresses. Keep a copy accessible offsite.

- Ensure provisions for alternate remote data transmissions.
- Provide cellular or satellite phones to essential personnel.
- Review your insurance policies to determine if you have adequate flood and wind insurance.
- Inspect roofs and flashing to ensure they are properly secure.
- Trim trees and shrubbery with safety in mind. Avoid electrical lines and excessive heights.
- Clear loose and clogged rain gutters and downspouts. Check drain pumps.
- Secure or brace outside storage tanks, sheds and other structures.
- Maintain a supply of plastic or tarpaulin to cover water-sensitive equipment.
- Buy plywood (min. 1/2 inch) or shutters to protect doors and windows.
- Ensure proper working condition for emergency equipment, such as flashlights and battery-powered radios, drills and saws.
- Stock non-perishable food, first-aid supplies and drinking water.
- Purchase N-95, NIOSH-approved disposable respirators for working with moldy or damp materials.
- Create an emergency evacuation kit for employees and their families including: firstaid, baby food and diapers, cards, games, books, toiletries, battery-powered radio, flashlights, extra batteries, blankets or sleeping bags, identification and valuable papers.

Steps to Take When A Hurricane Watch is Issued

- Activate your facility's Emergency Action Plan and ensure that copies are accessible off site.
- Listen frequently to radio, TV or NOAA Weather Radio for official bulletins on the storm's progress.
- Evacuate non-essential personnel.
- Move fuel and service emergency vehicles and generators inside the building or to a safe location.
- Inspect storm, roof and floor drains to ensure they are free of debris and fully functional.
- Prepare to cover all windows and doors with shutters or other shielding materials.
- Anchor all equipment stored outside.
- Brace all signs, tanks and roof equipment.
- Remove all awnings and lightweight outdoor coverings.
- Protect vital records against flooding and wind. Elevate all possible valuables off the floor onto furniture and shelving.
- Secure back-up records off site, away from the targeted hurricane area.
- Ensure an adequate stock of non-perishable food, first-aid supplies, drinking water and other supplies for staff and emergency crews.
- Check batteries in flashlights and radios.
- If you choose to stay in the building:

- Close all interior doors. Secure and brace external doors.
- Stay away from windows and doors even if they are covered. Take refuge in a small interior room, such as a bathroom, closet or hallway.
- In a multiple-story building, go to the first or second floors. Lay on the floor under a table or other sturdy object.

Steps to Take After a Storm

- Account for all employees who stayed at the facility during the emergency. If someone needs to be rescued, call professionals with the right equipment to help.
- Use caution in flooded areas. Floodwaters may be contaminated by agricultural or industrial chemicals, or hazardous agents.
- Do not attempt to drive across flowing water. As little as six inches of water may
 cause you to lose control of your vehicle. Two feet of water will carry away most
 cars.
- Stay away from standing water. It may be electrically charged from underground or downed power lines.
- Conduct a preliminary inspection to verify stability before entering a flooded, formerly flooded or wind-damaged building. If there is extensive damage, have a professional engineer or architect certify that the building is safe for work.
- Have professionals check gas, water and electrical lines and appliances for damage.
- Assess damage to buildings and equipment. Photograph and document all damage. Notify your insurance agent as soon as possible.
- Make temporary repairs to protect the building and contents. Remove and discard porous organic materials that have become wet or visibly contaminated.

- Use a flashlight for emergency lighting. Never use candles and other open flames indoors. Only use tap water for drinking and cooking after local officials have reported that it is safe to do so.
- When using a generator, be sure that the main circuit breaker is off and locked out prior to starting the generator. This will prevent inadvertent energizing of power lines and help protect utility line workers from possible electrocution.
- Avoid breathing dust (potential fungal spores) generated by wet building materials.
- Use the telephone only for emergency calls.

Staying Competitive After a Disaster Hinges on Effective Planning

Disasters come in many forms — some are imposed by nature such as hurricane, flood, ice storm, or earthquake; and some occur within a facility such as re, boiler failure, dust explosion, or toxic chemical spill. A business continuity plan helps make your company less vulnerable to these events. How quickly a business can recover from a disaster hinges on effective planning and education before an event strikes. Businesses that don't heed this planning lesson remain exposed to substantial loss of life, physical assets, revenue, and reputation.

Components of a Business Continuity Plan

A business continuity plan provides a framework for returning to normalcy. The planning process identifies hazards associated with a disaster and mitigates the devastating effects should an event occur. The plan includes three components, each addressing a specific planning phase: disaster preparedness, emergency response, and business recovery.

Disaster Preparedness planning considers the types of events that might compromise your business, assesses the hazards facing your company, and identifies steps to eliminate or minimize the impact of those hazards. Taking measures to prepare for a disaster improves your ability to protect employees, safeguard assets, and minimize financial consequences.

Emergency Response planning develops procedures that enable you to respond to a disaster. The emergency response plan is activated when an unexpected event occurs (such as a re or chemical spill) or when a forecasted event (such as a hurricane or flood) is

imminent. The plan responds until people are safe and there is no further threat of property damage or bodily injury.

Business Recovery planning addresses your company's critical business functions and defines procedures that facilitate restoration of sales, production, and operations to predisaster levels. If operations are disrupted for too long, the business may fail.

Five Steps to a Plan

- 1. **Build the Team** All successful business continuity plans begin with commitment and support from top management, and a designated person responsible for overseeing the process. Developing the plan requires a core team of individuals from production, human resources, quality, finance, and other critical business areas.
- 2. **Assess the Risk** To best protect your organization, you must first understand what makes it vulnerable. A risk assessment identifies and ranks the types of events or hazards most likely to threaten your business. The categories addressed within this risk assessment include facility construction, re protection, technology resources, staffing, past events, supply chain, specialized equipment, climate, security, and utilities.
 - By determining the likelihood, potential impact, and currently established resources related to disasters, the extent of vulnerability can be assessed. Immediate steps may be available to significantly reduce these vulnerabilities.
- 3. **Analyze the Business** The philosophy of a business continuity plan is to recover the most critical functions first and then, over time, restore all business processes. A business impact analysis (BIA) ranks functions from highly critical to important. This step requires input from all areas of your business, including confirmation from top management.

Most business functions today rely heavily upon technology resources. A strategy to replace the equipment and data should be spelled out within the business continuity plan. Your firm should review the possibility that replacement equipment could be quickly shipped from your IT vendor. Backup data files should be stored off site and accessible within a few hours.

Once the critical functions have been identified, business units need to recommend strategies that allow for the recovery of functions within a prescribed time frame known as recovery time objectives (RTO). These strategies should be reviewed by top management since they require a commitment of funding and staff.

4. **Document the Plan** – It is important to document step- by-step procedures. Most plans do not require expensive business continuity planning software – they can be written using basic word-processing programs.

Elements of the plan, such as BIA, should be verified on at least an annual basis.

5. **Test the Plan and Exercise the People** – To verify that your choices for recovery strategies are valid, testing the plan is essential.

These tests may be as simple as a tabletop exercise where staff discusses the steps required to respond to a disaster scenario. From these discussions, it may be apparent that prescribed strategies may not work. A testing timetable will help your firm track the required testing.

For example, the main location is not available for a period of 30 days. With this assumption in place, the business continuity plan can address steps to operate from a temporary or secondary location. It is better to assume a worst case scenario and be ready if something less severe happens.

A Worthy Investment

Business continuity planning is a cycle. It requires continual reviews, updates, and adjustments based on changes to your business operations. This may appear time-consuming and costly, but the investment is essential to maintaining a comprehensive, effective plan.

Once this process has been completed, your staff will better understand your company's vulnerabilities. Your company will have in place the tools needed to:

- Minimize lost revenue
- Control recovery costs
- Increase productivity during the recovery period
- Minimize regulatory impact
- Increase competitive advantage

Invest time in your business continuity plan now to preserve your company's standing

Saffir-Simpson Scale

The intensity of a hurricane is measured by the Saffir-Simpson Scale. The scale is based on sustained wind speeds and potential property damage. Hurricanes reaching Category 3 and above are classified as major hurricanes because of their potential for loss of life and property damage.

Category	Wind Speed (MPH)	Estimated Damage
1	74-95	No real damage to buildings
		Damage to unanchored mobile homes
		Some damage to poorly constructed signs
		Some coastal road flooding and minor pier damage
2	96-110	Some damage to building roofs, doors and windows
		Considerable damage to mobile homes
		Damage to piers and unprotected small craft
		Some trees blown down
		Coastal flooding
3	111-130	 Some structural damage to small residences and utility buildings
		Large trees blown down
		Mobile homes and poorly constructed signs destroyed

		Flooding near the coast destroys smaller structures with larger structures damaged by floating debris
4	131-155	More extensive curtainwall failures with some complete roof structure failure on small residences
		Extensive damage to windows and doors
		Major damage to lower floors of structures near shore
		Major erosion of beach areas
		Terrain may be flooded well inland
5	>155	Complete roof failure on many residences and industrial buildings
		Severe and extensive damage to windows and doors
		Some complete building failures with small utility buildings blown away
		 Flooding causes major damage to lower floors of structures near coast
		Massive evacuation of residential areas may be required