



Hurricane Preparedness for Business

With another active Hurricane Season predicted, The Hanover wants to help both you and your business prepare for a storm and cope with the aftermath and clean up. As all risk management professionals and business owners know being prepared is essential to minimizing storm exposures and ensuring your business can be back up and running as soon as possible.



Hurricane Preparedness for Business from The Hanover Insurance Group

Having a clear hurricane plan in place before it happens can help your company minimize injuries and property damage and get back in business quickly. With that in mind we have compiled the following guidelines to help you get started.



Important Terms to Know

Tropical Depression

A tropical depression is defined as an organized system of clouds and thunderstorms moving in a circular motion with maximum sustained winds of 38 miles per hour or less.

Tropical Storm

A tropical storm develops when the winds within a tropical disturbance reach 39 miles per hour and move in a circular pattern in a counter clockwise direction.

Hurricane Watch

A hurricane watch is issued when a hurricane has become a threat to coastal areas. Businesses in those areas should monitor the situation and be prepared to take precautionary measures promptly if a hurricane warning is issued.

Hurricane Warning

A hurricane warning is when hurricane force winds, dangerously high water, and rough seas are expected in a specific coastal region within 24 hours and precautionary measures should immediately begin.

Once a hurricane warning has been issued it is important for people in the forecasted affected area to monitor radio and television weather reports for important information and instructions.



Storm Surge

A storm surge is a dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can cause extensive flooding and damage. Surges can reach 25 feet high and extend for 50-100 miles.

Hurricane

Hurricanes are products of a tropical ocean, a warm, moist atmosphere and are powered by heat from the sea. They generate high sustained winds over many miles and create coastal and low land flooding.

The official season for hurricanes in the United States is June 1st through November 30th. The number and severity of storms fluctuates from year to year determined by atmospheric and ocean temperatures.

All coastal areas bordering the Atlantic Ocean and the Gulf of Mexico are vulnerable to hurricanes. The southeastern and gulf coast states have the greatest potential for direct impact; however, the mid-Atlantic and northeastern coastal areas are also at risk. People generally assume that hurricanes are only a coastal event and problem, however inland areas hundreds of miles from the ocean can be affected by hurricane and tropical storm force winds, tornadoes and flooding.

A hurricane's direction, speed, and intensity can rapidly alter, meaning the threat to any particular area(s) can also quickly change.

Are You at Risk?

Assess your vulnerability. How close to the coast are you located?

Businesses within 50 miles from the shore have a greater risk of property damage and business interruption than those located further inland.

If your business is within 50 miles of the coast, you need to provide protection for all doors and windows of the building(s) which are the main entry points for wind and water. This will help minimize the structural damage that may occur. In addition take steps to protect the interior; files, furniture, electronic equipment from storm damage and resulting mold by moving them away from doors and windows and covering them with waterproof materials or moving them to a safer location.



Hurricane Categories

The National Weather Service rates hurricanes by their intensity, using a scale of one to five.

The damage expected from the different categories of storms detailed below is typical; however actual damage will vary depending on building code compliance, conditions of the structures, zoning restrictions, and other variables.

1 Category 1

- Winds of 74 to 95 mph
- Storm surge of 4 to 5 feet above normal tide
- Damage to shrubbery, trees, poorly constructed signs and unanchored mobile homes
- Low lying coastal roads flooded

2 Category 2

- Winds of 96 to 110 mph
- Storm surge of 9 to 12 feet above normal tide
- Some damage to roofing materials of buildings; some wind and door damage
- Major damage to exposed mobile homes.
- Coastal roads and low lying escape routes made impassable by rising water 2 to 4 hours before arrival of hurricane

3 Category 3

- Winds of 111 to 130 mph
- Storm surge 9 to 12 feet above normal tide
- Large trees blown down
- Some damage to roofing materials of buildings; some window and door damage
- Some structural damage to small buildings
- Mobile homes destroyed
- Serious flooding at the coast
- Many small structures destroyed; large structures damaged by waves and debris

4 Category 4

- Winds of 131–155 mph
- Storm surge 13 to 18 feet above normal tide
- Shrubs and trees blown down, all signs down
- Extensive damage to roofing materials, windows and doors. Complete failure of roofs of many small residences
- Complete destruction of mobile homes
- Flat terrain 10 feet or less above sea level flooded inland as far as 6 miles
- Major damage to lower floors of structures near shore

5 Category 5

- Winds greater than 155 mph
- Storm surge greater than 18 feet above normal tide
- Shrubs and trees blown down
- Considerable damage to roofs of buildings; very severe and extensive damage to windows and doors
- Complete failure of roofs on many residences and industrial buildings
- Some complete building failures
- Complete destruction of mobile homes
- Massive evacuation of residential areas on low ground within 5 to 10 miles of shore possibly required

The following enhancements added to your building(s) can mean the difference between a building that allows you to re-open immediately or one with major damage that shuts you down indefinitely.

- Hurricane shutters, panels or shields
- Wind-rated windows
- Braced or wind-rated garage doors—older garage doors are at risk and replacement of both doors and tracks with a 140mph wind-rating is recommended
- Fitted plywood to protect windows and doors

If your business is located more than 50 miles from the coast it is still a good idea to take the above precautions. Storms such as Hurricane Hugo traveled more than 100 miles inland and battered Charlotte, North Carolina with winds of over 100 mph. The frequency and intensity of hurricanes is increasing and nobody can say for certain whether or not global warming is playing a part—however future monster storms such as Hugo should be expected.

Writing Your Hurricane Preparedness Plan

Creating a Hurricane Preparedness Plan is critical and training your employees to successfully implement vital. Some of the major areas to address are:

- Separate business locations need separate plans
- Determine what equipment and inventory need to be moved to a separate and secure location and make arrangements
- Include a list of tasks for all phases i.e.; pre-storm, during the storm, post-storm
- Clearly define specifics for the protection of buildings, data, records, equipment and inventory
- Establish a Hurricane Kit for each location that is stocked with essential supplies
- Decide which employees will be available to help with hurricane preparation. Do not assume everyone will be available especially if a mandatory evacuation is ordered
- Identify who will implement the plan and assign necessary tasks
- Create an emergency call list with 24-hour telephone and cell phone numbers of all essential employees
- Clearly communicate your company policy i.e.; when employees will be released from work, how to receive updates, who to contact for return to work information
- Also remember when creating your own plan to check with your local community and review theirs. Local officials should have detailed information for your immediate area.



Everyone Should Prepare

Whether you are within 50 miles or further from the coast there are some best practices you should consider to ensure your business can survive:

- Develop a written Business Continuity plan that includes hurricane preparedness
- Have emergency backup power lined up for your facility before a storm is forecast
- If you are building a new facility, make sure that hurricane protection and emergency power backups are key design features
- Buy flood insurance if there is a possibility for flooding in your area or if you could be affected by a storm surge. Learn more about flood insurance on the National Flood Insurance web site at fema.gov.
- If your facility is in a low-lying area, make arrangements for alternative storage sites at a higher elevation where equipment, files, and vehicles can be moved prior to a storm
- Depending on the type of business you run you may need additional security at the site following a storm

There are also some simple steps you should take prior to hurricane season to ensure a successful pre and post implementation.

- Update emergency contact list
- Meet with all essential employees to make sure they understand their role and the plan
- Update the plan with any new locations
- Make sure the kits are stocked with all necessary items
- Make sure all hurricane shutters are accessible and usable
- Test any and all emergency generators and ensure there is enough additional fuel available
- Contact all vendors/contractors to go over your post-storm expectations of services
- Communicate business continuity expectations to all employees and ensure they have appropriate contact list
- Update and post evacuation routes for employees

When to Act

While each storm may offer different scenarios and each business and location a different amount of time to get ready, it's best to act quickly and allow ample time to prepare for the storm. Once a hurricane warning has been issued, there will most likely be insufficient time to fully implement your plan.

Securing your Facility

- Distribute the necessary supplies from the kit
- For fleets—move all vehicles into a garage. Park them as closely together as possible. Remove all keys and secure in a separate area
- Unplug all electrical equipment including; terminals, refrigerators, coffee makers, calculators, fax machines, printers, copy machines, computers, phones, cable TV, etc.
- Cover all terminals, computers, printers, phones, fax, copy machines and other equipment with heavy plastic and secure
- Help protect smaller windows from wind gust and flying debris by applying waterproof tape in a criss-cross pattern

- Brace inward-opening exterior doors and roll-down doors on the inside
- Cover large windows and glass doors which can be blown in by hurricane force winds with plywood
- Place all loose desk articles in drawers and cabinets
- If applicable move all shop torches and welders to safe storage locations
- Place all paperwork and paper files in a secure location above ground level to avoid water damage
- Secure all loose outside items that can't be removed with rope or chains (tables, trash cans)
- Identify any outside signs or awnings that could be blown loose and remove or secure in place
- Secure outside dumpsters
- Strongly anchor any portable storage buildings
- If your buildings roof is a composition roof with a gravel covering, remove loose gravel to minimize damage from flying stones being blown off the roof
- Ensure rooftop equipment such as exhaust fans, wind turbines and air conditioning units are securely fastened to the roof deck
- If applicable shut down gas pumps
- Place sand bags outside doors
- Instruct staff to take home all personal items including tools/toolboxes
- Remove all supplies (copy paper, etc.) from floor
- Remove all checks and cash to a secure location and/or provide to comptroller for safe keeping
- Backup computer records on disk and store at a separate secure location
- Install storm shutters
- Communicate pre-storm expectations to staff (dismissal times etc.) as well as their responsibility to contact management immediately after the storm passes to determine when to return to work
- Make sure staff has contact information and instructions for business continuity post-storm
- Know where the first aid kit is located

Please note: We suggest you stockpile emergency supplies such as sandbags, plywood and chains prior to hurricane season since supplies quickly dwindle once a storm is forecast

After the Storm Passes

- Monitor radio and television broadcasts to determine if you will be allowed access to your business location(s)
- Looting may occur during the storm or immediately after—call security vendor to confirm they are on their way to your business once return access is granted
- Assess damage to the exterior of your buildings and if they appear structurally unsafe do not enter
- Be on the lookout for live power lines that may be present
- Confirm that the buildings electrical system is dry and utility power is reliable before turning on the main breakers.
- As much as possible, attempt to mitigate additional damage to buildings and inventory by sealing window and door openings with weather proof material
- Take detailed photographs or videos of damage to your buildings and inventory for documentation prior to the site being cleaned up

Sample Check Lists

Hurricane Kit Inventory

- Copy of your companies Business Continuity and Hurricane Preparedness Plans
- Updated contact list
- Updated list of roles and responsibilities pre and post-storm
- Emergency vendor contacts (utilities, fuel, security, and off-site storage)
- Cell phones, two way radios, AM/FM radio or weather radio
- Flashlights, batteries and portable lighting
- Plastic bags, labels, masking tape and markers
- Hazard tape
- Unopened padlocks and keys for lock down of property and equipment if necessary
- Pre-paid non-activated phone cards that can be used to contact vendors, employees or family members

Helpful Online Resources

National Hurricane Center: www.nhc.noaa.gov

FEMA: fema.gov

Business Continuity Plan—Open For Business:
<http://www.disastersafety.org/>

Sample Hurricane Preparedness Plan: cdera.org

Hurricane Preparedness Checklist

Use this as a quick reference to check if your Hurricane Preparedness Plan is up-to-date.

ACTION ITEMS	COMPLETED	NOT YET COMPLETED	DATE TO BE COMPLETED
Business Continuity Plan updated with Hurricane Plan			
Hurricane Preparedness Plan Communicated to Staff			
Stocked Hurricane Kit			
Updated Vendor/Contractor Contact List			
Updated Employee Contact List			
Hurricane Supplies Ordered and On-site			
Update and Post Evacuation Routes for Employees			
Test Generators			
Business Continuity Plan updated with Hurricane Plan			

