



Business Protection Lessons Learned: 25 Years After Hurricane Andrew

August 24, 2017, marks the 25th anniversary of Hurricane Andrew, a Category 5 Hurricane that devastated South Florida and parts of the Gulf Coast. Tragically, 26 people lost their lives, while 250,000 others were left homeless, and 82,000 businesses were damaged or destroyed. Insured losses topped \$24 billion (2016 dollars), making it the third-costliest hurricane in U.S. history.

Over the past 25 years, significant progress has been made in identifying and addressing structural weaknesses in the built environment, gaps in emergency planning and response, and community resilience needs. But, over the course of several relatively quiet hurricane seasons, some of this progress has eroded due to a dangerous misperception that "it can't happen here."

Hurricane Andrew's milestone anniversary thus offers a reminder that all businesses need to prepare for severe weather, and that when it comes to unexpected disasters, it can (and some day probably will) happen here.

In this article, the Insurance Institute for Business & Home Safety (IBHS) offers five important business protection lessons from Andrew, which echo those from other major storms. IBHS urges business owners and managers to heed these mitigation lessons and learn what to do before, during, and after a storm to ensure facilities and operations are better able to withstand the next major weather event.





It Only Takes One Major Storm to Destroy a Business

Although it was the only storm to make landfall on the U.S. mainland in 1992, Andrew starkly demonstrated it takes just one storm to ravage multiple communities, businesses, homes and families. Too often, the media marks the June 1 start of the hurricane season with an intense focus on past devastation, but if tropical weather patterns remain calm during the early summer, public attention moves away from the ongoing need for timely preparedness and rapid response.

Andrew itself received little early attention during a quiet hurricane year, starting as a tropical wave off the coast of Africa on August 14, developing erratically over the Atlantic, and then blasting ashore in the early morning hours of August 24. While the warnings were adequate to allow massive evacuations in the threatened regions (including almost one million people in South Florida), the rapid and chaotic recognition of the immediate threat did not allow most business owners to implement emergency plans that could have reduced property and business income losses. To avoid such situations in the future, IBHS has developed two no-cost, easy-to-use programs to help businesses prepare for weather emergencies—by preparing “while the sun shines,” businesses can heed unexpected, mandatory evacuation orders knowing they have done everything possible to reduce storm damage.



OFB-EZ is a business continuity toolkit for small- and medium-sized businesses developed by IBHS and field-tested during and following real disasters. The goal is

to help business owners and managers put together an effective plan that will allow them to continue operating even if their usual facility is damaged or inaccessible after a storm or other disruption.

DisasterSafety.org/ibhs-business-protection/ofb-ez-business-continuity



EZ-PREP guides businesses through emergency preparedness and response planning needs that can be done in the off-season, when severe weather is first forecast, or immediately before, during, and after a storm.

DisasterSafety.org/ibhs-business-protection/ez-prep-emergency-response-planning



The Power of Power to Preserve Your Business

Sadly, one in four businesses forced to close for at least 24 hours by a disaster never reopens. This is a big lesson from Hurricane Andrew—3,300 miles of power lines, 3,000 water mains, and 9,500 traffic signs and signals were destroyed, leaving approximately 1.4 million people without electricity and forcing the shutdown of many businesses that were not physically damaged.

For many businesses, a generator is a critical component of business continuity planning. It can enable a business to continue operating some or all electronic equipment and lights, preserve perishables, and make conditions more comfortable for employees—all of which minimize business interruption. However, in order to assure safe, effective operation, generators must be properly selected, correctly installed (including the consideration of potential flood heights), well-maintained and appropriately used. During operation, proper ventilation is a critical element for reducing the risk of carbon monoxide poisoning.

The time to purchase, install and maintain a generator is well before a major storm or disaster strikes. In the days following such an event, professional assistance may be unavailable, power lines may be down, and access roads may be blocked. In addition, when using a gasoline-powered generator, make sure you have adequate, fresh fuel for the period of expected power outage, as gasoline also may be in short supply following a disaster.

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Technology Facilitates Critical Communications, But People Need to Stay in Touch

It's hard to believe Hurricane Andrew occurred at a time when cell phones were in their infancy, and e-mail systems required a landline connection. More than 150,000 homes and businesses lost phone service for a lengthy period, making communications for many South Florida businesses difficult if not impossible.

Today, cell phones, digital technology and social media can make it much easier for businesses to stay in touch with employees, customers, vendors, and financial lifelines following a disaster. That said, modern technology does not work without human intervention. Employees want to know, "What is happening and what do you expect of me?" On a regular basis, employees need to be educated about your business continuity plan and how they need to stay in touch.

When severe weather is threatening, make sure all employees have information about their role in keeping your business open. After the storm, use multiple communications channels such as phone trees, social media and intranet site postings to let employees know where and when to report to work, where employees should direct questions, and when and where more details about the disaster will be available. Also, provide capability for employees to update their status, availability and needs. Once the facility has completed its recovery period, implement a feedback process for all employees to provide input and experiences to improve planning for future events.



At least 82,000 businesses were damaged or destroyed during Hurricane Andrew in 1992, including those pictured here in South Florida.



Strong Building Codes and Strong Enforcement Go Hand-in-Hand

Hurricane Andrew reinforced the importance of both adoption and enforcement of strong building codes. Building codes are the regulatory structures that are intended to safeguard homes and businesses from incidents such as fires and electrical malfunctions, as well as hurricanes and other natural disasters. In fact, building codes are minimum standards for life safety and do not guarantee property protection or continued building functionality during or after severe weather events. Prior to Hurricane Andrew, it was generally believed that South Florida had some of the strongest building codes in the nation. However, the lack of adequate enforcement of these codes was not understood—in fact, in many areas, faulty construction and poor workmanship were hidden until they were uncovered by the storm, a major contributing factor to the destruction and loss of life.

Fortunately, the devastation left by Andrew fueled the beginning of a process to reevaluate the adequacy of building code standards and their enforcement. This process started in Florida, which now has some of the strongest building codes in place for both residential and commercial structures, although enforcement must remain a priority throughout the state. Unfortunately, it is still the case that many other states lack statewide residential and/or commercial codes and effective code enforcement mechanisms, or have failed to update their codes to reflect improved engineering knowledge, leaving people and property needlessly vulnerable to high-wind events. Businesses operating or planning to locate in hazardous areas should consider building beyond code requirements if practicable (e.g., through FORTIFIED Commercial™, discussed next).



Build Strong; Build FORTIFIED

For businesses that want to invest in protection that goes beyond building codes, IBHS has developed the FORTIFIED Commercial™ program, which is a voluntary, superior construction standard and designation program for commercial construction and retrofits. FORTIFIED Commercial standards address specific natural hazard risks (hurricane, high wind, and hail) and are intended to further reduce damage beyond the baseline in most building codes. In addition, the program includes backup power provisions to have in place well before a storm threatens. And, an on-site verification process assures the technical requirements of FORTIFIED Commercial actually are incorporated into the building, without relying only on the building code enforcement process. More information is available on the technical standards at FortifiedCommercial.org.

Breaking the Cycle of Destruction

25 years ago, Hurricane Andrew was a wake-up call about the destruction that can be wrought by severe weather and hurricanes. In many areas, improvements have since been made in the design, construction and renovation of buildings; continuity planning and preparation; communication and social media; and community evacuation and emergency procedures. Still, serious challenges remain, including aging infrastructure; protecting vulnerable populations; and the greater likelihood of flooding in many areas.

Businesses have a strong financial interest in helping the communities in which they operate improve their resilience and remain strong and stable places to live and work. The lessons of Hurricane Andrew are a starting point for businesses to reduce their own disaster risk and that of their employees and communities.