Preparing for a Hurricane
Employee Safety and Business Continuity

Jim Shelton, CAS
Houston North Area Office
Preparing for a Hurricane

• What do you think the differences between a hurricane and a flood could be to you and your business?
Preparing for a Hurricane
Preparing for a Hurricane
Preparing for a Hurricane

• Part 1 – Preparing for a Hurricane
• Part 2 – Cleanup your Business and Home
• Part 3 – Resources
Preparing for a Hurricane

• Work conditions change drastically after a hurricane and other natural disasters
• After the hurricane response and recovery workers will face additional challenges and hazards while performing familiar and unfamiliar tasks
Preparing for a Hurricane

• Things to consider include:
  • Business Continuity and Hurricane Preparation which involve having workable plans
  • Recognizing Potential Hazards and Protecting your Employees to ensure they have the training, tools, procedures, and equipment to recognize hazards and to work safely
Preparing for a Hurricane

• Human Resources
  • How will a disaster impact your employees' ability to return to work and how will your customers reach you or receive your goods and/or services
Preparing for a Hurricane

• Physical Resources
  • Inspect facilities to assess how a hurricane will impact them. If needed have a professional engineer assess the facilities
  • Develop procedures on how to protect your property inside and outside
Preparing for a Hurricane

• Business Continuity
  • How will the disaster impact your ability to service your customers and your ability to obtain supplies and resources
Emergency Action Plan

• OSHA may require and Emergency Action Plan under 1910.38 and 1926.35 which covers workplace emergencies
  • Preparing for a hurricane involves many things not addressed by an OSHA emergency action plan
• Some considerations....
Emergency Action Plan

- Company Location
- Alternate Location
- Emergency Contacts
- Emergency Plan Contacts
- Disaster Types
- Emergency Action Plan Team
- Mutual Aid Resources
- Critical Operations
- Suppliers/Contractors
- Evacuation/S.I.P./Shutdowns

- Communications
- Cyber Security/Computers
- Records Back Up
- Employee Contact Information
- Supplies
- Equipment/Machinery/Vehicles
- Voice/Data Communications
- Misc Resources
- Training
- Checklists
Company Location

• Identify the company name, address, phone numbers on your plan
• Consider the scope of the plan. Satellite locations, job sites, projects and how they will be included or identified
Alternate Location

• Establish a secondary location(s) where operations can be setup in the event your primary location(s) are damaged or unusable
• Ensure everyone knows where it is located including employees, suppliers, and customers
Emergency Contacts

- Identify who the primary and secondary emergency manager is and how they can be contacted
- Identify emergency contacts such as 911, non-emergency police and fire, insurance provider, city, county, State, Federal agencies, law enforcement
- Establish procedures for identifying disaster response organizations, emergency medical facilities in your area
Emergency Plan Team

• Identify who is on the emergency planning team and their contact information
  • CEO, HR, Safety, Finance, IT, Personnel...
  • Establish sub teams if needed
• Identify where they will go in the event of an emergency and identify their duties and tasks
Disaster Types

- Identify the types of disasters you may be exposed to and ensure that plans account for their unique challenges
- Hurricanes, Fires, Earthquakes, Floods, Tornados...
Mutual Aid Company/Organizations

• Identify companies and neighboring businesses who you will work with on your plan such as building management or to share equipment or other resources

• Get to know your neighbors and their resources and operations even if they can’t provide assistance
Critical Operations

• Establish a prioritized list of operations, staff, and procedures you need to start assessing and recovering from the disaster
Suppliers/Contractors

- Identify companies and their contact information and numbers (including their alternate contact information) who you will need to obtain supplies, materials, services, and resources from.
- Establish an agreement beforehand on what can be provided.
- Identify back up suppliers for each resource.
Evacuation/Shelter in Place/Shutdown

• Establish the actions to take for each type of situation and whether it’s evacuation, S.I.P, or shutdown.
• Establish criteria on when each will be implemented and a warning and communication system to inform personnel
• Establish where to evacuate or S.I.P.
• These elements should already be covered in an OSHA Emergency Action Plan
Evacuation/Shelter in Place/Shutdown

• For hurricanes there is a storm timeline and advance warning...
  • Develop actions to implement in advance...
    • Shutdown 72 hours prior?
    • Evacuate 48 hours prior?
  • Rotate employees home and work so they can prepare too
  • Consider evacuation orders, contra-flow etc. that may impact operations
Communications

• Establish how the emergency plan will be communicated to employees, management, planning teams, job sites...
  • Training

• Establish how you will communicate to them in the event of a disaster...
  • Consider that phone service may not be available

• Consider and where you can obtain reliable information on the situation...
• Determine how your computer hardware and software will be protected including loss of utilities, water damage...
• Establish or identify back up computer systems that can be accessed such as at your alternate locations
• After a disaster there are a lot of scams
Records Back Up

- Identify paper and electronic records that need to be copied and/or backed up. Who will do it, and where the back up information will be maintained?
  - Payroll, Accounting, Billing, Emergency Action Plan, site maps, insurance policies, bank information..
    - Safety programs, SDSs...
Employee Contact Information

• Have a list of employees and how to contact them
• Inform them how they can find out what to do and go after a disaster
• Identify critical employees and any skills they may have critical to recovery operations
  • What if they are affected by the disaster and can’t be reached or come in?
  • Encourage employees to have a home plan
Supplies

• Identify the supplies needed to prepare for a hurricane or other disasters to protect property and lives
• Ensure an adequate stockpile is obtained and stored in a safe accessible place
• Include safety equipment that may be needed
Hazards

Exposed Electrical lines and Utilities

Hazard of Heavy Equipment
Hazards

Health Hazards

Heat Illness Hazards
Hazards

Mold Hazards

Water Borne Diseases
Hazards

Food Borne Diseases

Animals and Insects
Hazards

Generators

Traffic
Hazards

- Sharp and Jagged objects
- Roof Damage and Fall Hazards
Hazards

Unstable Structures

Unstable Structures
Hazards

Storm Surge

Fallen Trees
Equipment/Machinery/Vehicles

• Identify critical equipment, machinery and vehicles needed and ensure they are in working ordered and plan to have it stored in a safe, secure, accessible place

• Provisions for protecting unique critical equipment

• Identify critical equipment you may need to obtain during a recovery and identify them on your supplier list
Voice/Data Communications

• Identify your voice, data, email, website, cable, DSL... how it will be used and protected
• Establish alternate means of communication to employees, suppliers etc.
  • Sometimes texts works when voice doesn’t
  • Old plug in phones may work when wireless ones won’t
  • Satellite phones?
Training

• Ensure that all employees are trained on the emergency action plan, their duties and responsibilities
• Emphasize hurricane preparedness at tool box talks
• Ensure employees expected to respond to or clean up after a hurricane are trained on the hazards, tools, and equipment
Checklists

• Develop as part of the plan checklists that identify duties and tasks to be accomplished
• Consider developing JSAs for various preparation and response tasks that identify the hazards, corrective actions, tools, training, and equipment needed to work safely
• Hand Hygiene
  • There was a hospitalization and two deaths from necrotizing fasciitis e.g. the flesh eating bacteria during Hurricane Harvey
  • One death was to a worker who had been doing demolition work after the flooding
    • Proper PPE/Protective Gloves
    • Wash Hands with Soap and Water
    • Wound Care
• Little things can be deadly
• Preplan so you know what to do and how to do it safely.
Resource Examples

There are a number of examples out there to get started. Also check with your insurance company, trade associations, local, State, and Federal Emergency Management organizations...
Resource Examples

• Everyone should have a home emergency preparation plan to ensure they are ready before and after the hurricane.
Resources

http://www.readyharris.org/

http://readyhouston.wpengine.com/
Resources

https://www.ready.gov/

http://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/hurricane
Resources

https://www.cdc.gov/niosh/topics/emres/flood.html

Resources

- [Texas Department of Insurance](https://disastersafety.org/ibhs)
- [OSHCON: Occupational Safety and Health Consultation Program](http://www.tdi.texas.gov/oshcon/)
- [OFB-EZ—Business Continuity Planning](https://disastersafety.org/ibhs-business-protection/ofb-ez-business-continuity/)
Disclaimer

This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics [or hazards], it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer’s legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA’s website at www.osha.gov.