



# **Preparing for the Unthinkable, Planning for the Inevitable: Disaster Prevention, Response, and Recovery for Libraries.**

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# Tornados



- Wind speed of 100 mph or more
- Ground speed varies
- U.S. has the most tornados
- Develop when warm moist air below mixes with cool air in higher clouds.
- National Weather Services issues Watches, Warnings



# Hurricanes



- Typically 2-3 major ones each season.
- Hurricane Season: June 1- November 30<sup>th</sup>.
- There is a 69% probability of a major hurricane in 2020.



# Thunderstorms



- Downburst “cells” produce damaging winds.
- Cause flash floods where a season of rain may fall in hours
- Flash flooding is worse in urban areas due to impervious cover

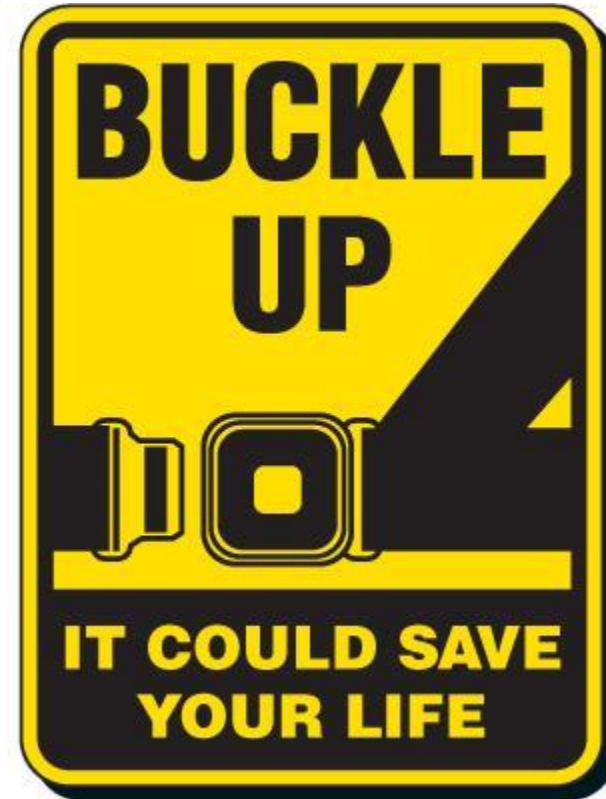


# Protection and Risk





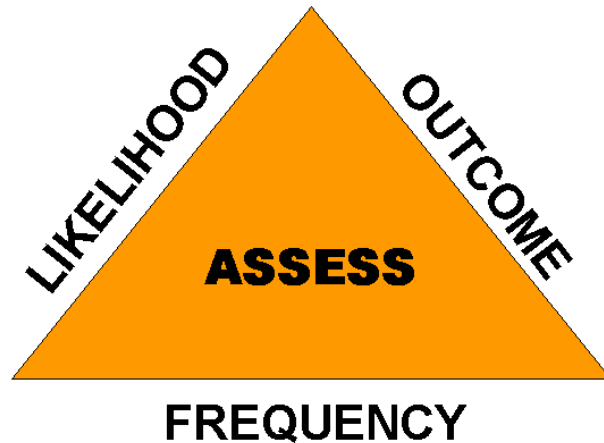
# Managing Risk





# Assessing Risk

**Consider the risk...**



- **What are the risks?**
- **How likely are they to occur?**
- **How often could they occur?**
- **What is the likely outcome if the risk event occurs?**



# Flood



- Fire suppression
- Hot and cold fresh water
- Hot water radiators
- Hot water to HVAC Heat Exchangers
- Steam to HVAC
- Chiller water to HVAC
- Condensation return
- Rain water
- Sewage





# Flood



- Heed the warning signs
- Report signs of leaks as soon as they appear



# Flood





# Fire



- **Policy on use of electric space heaters**
- **Use of extension cords**
- **Ensure that enough electrical circuits exist for break rooms**
- **Enforce no smoking policy**



# Fire



- Arson is a frequent cause of library fires
- Improve sight lines to public areas
- Be aware of suspicious behavior
- Ensure that fire detection and suppression systems are regularly inspected



# Fire



- Fire Marshall or special Arson Investigation Unit
- Library becomes a crime scene
- Documentation of Fire pattern
- Staff/witness interviews
- Evidence collected



# Renovation





# Mold

- Humidity consistently above 55% rH
- HVAC System Failure
- Renovation changes airflow
- Attempt to save \$\$\$ on humidity and temp control
- \$\$\$ to remove





# Planning



- Form a Disaster Prevention and Response Plan Task Force
- Assess risks to collections from building systems
- Monitor building systems regularly
- Build communication with maintenance and security staff for organizational support





# Assessing Risks: The Collection

- Documentation of holdings
- Age of materials
- Special Collections
- Items with specific historic or artifactual value
- Location of collections in the building?





# Assessing Risks: Floor Storage





# Assessing Risks: Organizational Support

- Who responds?
- Do you know your facilities staff?
- Who monitors the building at nights, weekends, holidays?
- If water is flowing out from under a locked door, who has the keys?
- If you need supplies (a mop and bucket) how do you get them?
- Do you have remote loggers to warn of leaks?





## Assessing Risks: Information Technology

- Are the library catalog and essential business record systems backed up?
- Who would restore the catalog and other systems in the event of a disaster?
- Are IT access services for library users, (WiFi) part of the restoration of online services





# Risk Checklist

- Known building system issues: leaks, drainage, flooding, humidity?
- Collections Stored in the basement?
- Collections stored remotely?
- Materials directly on the floor?
- Collections close to large windows
- Collection items inventoried through the catalog or other documents
- IT systems backed up and restorable
- Building and collection areas monitored



# Planning

- Form a Disaster Prevention and Response task force and make developing a Disaster Recovery and Response Plan a priority
- Assess Risks
- Is your collection cataloged and inventoried?
- Determine how your insurance works – documentation required?
- Map the location of cut-off valves for water
- Map the location of special collection items
- Purchase Disaster Recovery supplies and secure them in a dedicated space



# Planning

- Communication is essential: management, maintenance, security, first responders
- Arrange with administration for a source of emergency funds that can be used when normal city/campus offices are closed
- Develop an approved template for press releases and decide who will be the spokesperson
- Obtain a dedicated emergency triage space outside of the library
- Secure a contract with a Disaster Recovery Service



# Planning Checklist

- Building and environmental risks assessed and monitored
- Disaster Response and Recovery Team organized and trained
- Disaster Response and Recovery supplies secured and accessible
- Disaster Response Plan developed with a telephone tree for staff and facilities.
- Disaster Response plan communicated with administration and building maintenance and security.





# Disaster Planning



- Plan online but print each team member a copy
- Response team keeps copies at home
- Includes an emergency telephone tree for response team and other essential personnel
- Version control essential for updating
- Plastic sheets for triage instructions, maps



# Supplies Checklist

- Plastic Sheeting
- Duct Tape
- Data loggers for remote monitoring
- Buckets and mops
- Wet dry vacuum
- Rubber or nitrile gloves
- Floor fans
- Space to dry books (tables or a clean, dry floor)
- Paper towels



# Additional Supplies

- Plastic painters drop cloths
- Tyvek coveralls
- Rubber gloves
- Rubber boots
- Dust masks
- Paper towels
- Tables
- Fans
- Extension cords
- Emergency lights
- Flashlights / spare batteries
- Waterproof digital camera
- Large capacity camera chip
- Garden hose/water for rinsing
- Buckets
- Printed triage forms
- Boxes or milk crates for packing books for freezing
- Plastic bags
- Wax paper



# Response

- Special Collection items
- Business Records
- Insurance Documentation
- Triage books from top to bottom of affected areas
- Microforms
- Computer hard drives



# Plastic Sheeting





# Recovery



- Clay coated paper first
- Interleaving paper towels between damp pages



# Recovery



- Destroyed: Burned and soaked = Document for discard
- Severely Damaged: Heat, smoke damaged, soot, wet = Freeze / dry
- Damaged: Soot, smoke, damp = Clean and dry



# Recovery

- Safety first
- Predetermine when you call in a recovery service
- Triage criteria essential
- Practice interleaving and drying books in a disaster drill before the real thing happens







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