



JENSEN HUGHES



2023 Virginia Healthcare Association Flood Emergency

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Healthcare In General

87%

Percentage of organizations with one or more events in the last 5 years that required implementation of the **EMERGENCY PREPAREDNESS PLAN**

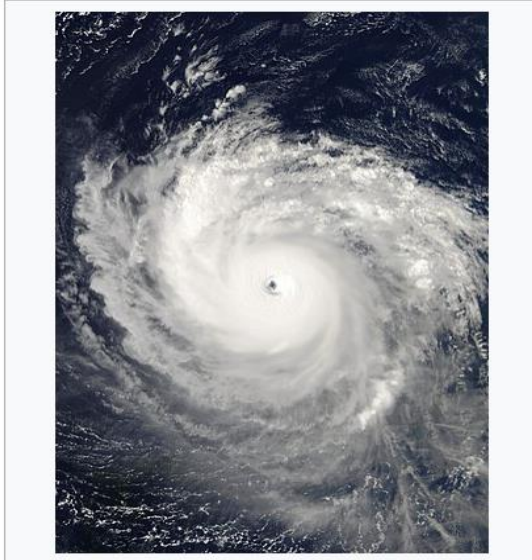
43%



In the last 20 years, flooding has been the most common natural disaster, accounting for 43 % of all recorded events.

What caused the flooding?

Hurricane Isabel



PLAN ACTIVATION

Any staff member becoming aware of a disaster or pending disaster should:

- + If there is an immediate life threat, institute appropriate procedures.
- + Notify their immediate supervisor, who will alert the person in charge of the facility at the time.
- + If the flood poses danger to residents, staff, or visitors, call 9-1-1 immediately and include the following information:
 - ✓ Name of facility.
 - ✓ Address and nearest cross street.
 - ✓ Describe the flood situation (basement, room numbers, etc.).

Immediate Threat – Staff Actions

- + Move residents and staff to unaffected portions of the building.
- + Move important records, equipment, etc.
- + Move computer hard drives to the top of desks.
- + Place resident personal articles and drawers on top of beds or dressers.
- + Prepare for the evacuation of the building should it become necessary.

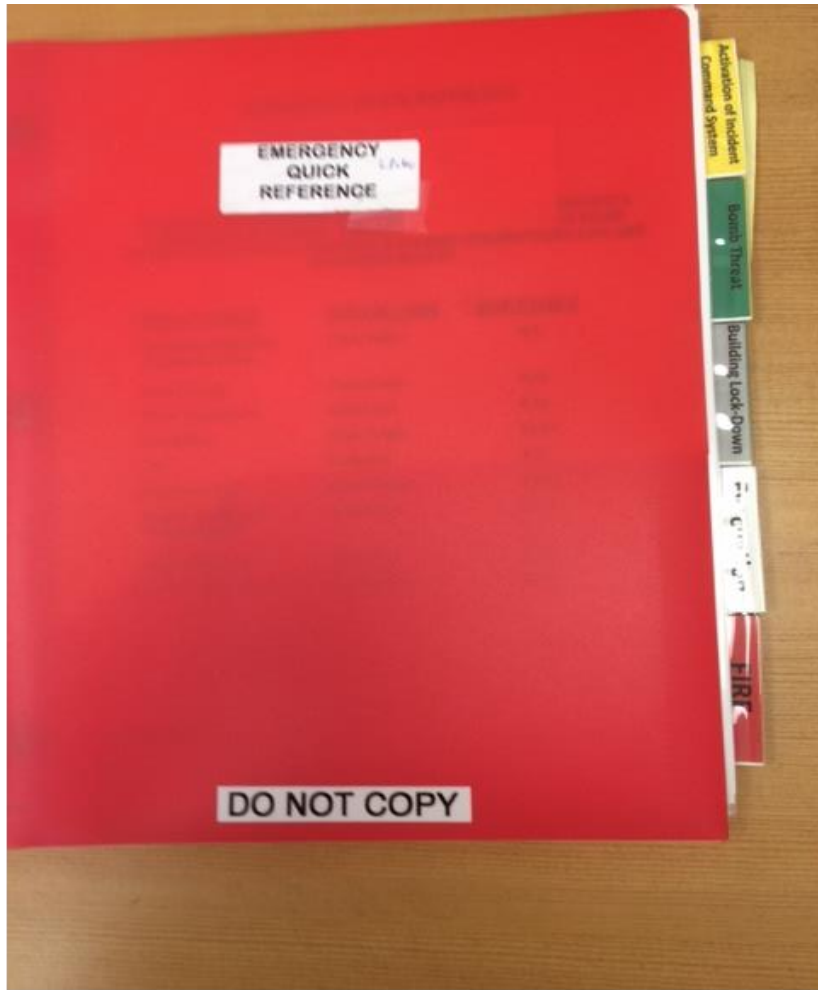


Immediate Threat – Warning!!

DO NOT ENTER ANY AREA WHERE THE WATER LEVEL IS ABOVE ELECTRICAL OUTLETS. ALSO, DO NOT TOUCH ANY ELECTRICAL EQUIPMENT WHEN STANDING IN WATER.



Immediate Threat – Shut Off Locations?



Immediate Threat – Response

- + Consider activating the Command Center.
 - Assign positions to manage the incident.
- + How might Incident Command activation procedures be modified if the event were to occur at night or on the weekend?
- + Assessment of Staff and or Operations.
Consider Rapid Assessment Form.
- + What local and regional community partners would be informed that an incident has occurred?



Response

- + Immediately isolate the source.
 - Shutting Down v. Redirecting
- + Isolate electrical power.
- + Perform rapid life safety assessments.
- + Secure and barricade the area using signage, and barricade tape.
- + Infection Control / Regulated medical waste considerations.
- + Contact local vendors/contractors for clean-up of contaminated silt, debris, oil, chemicals, water, mildew, etc.



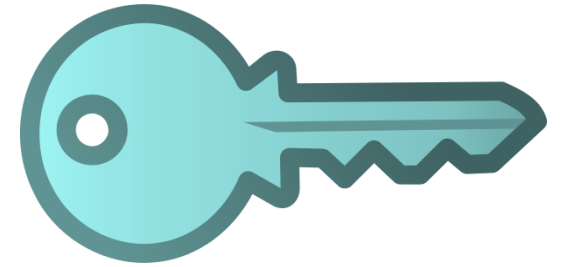
Contractors – Sharing Information

- + Proper Onboarding of an Emergency Services Contractor will reduce confusion and downtime.
- + Successful partnership requires training, communication, and collaboration.
- + Your emergency contractor should know your facility as well as your teams. The more they understand, the more seamless an emergency will go.
- + General understanding of the building's construction (double layer drywall, flooring types, subflooring type, lead walls, framing types, asbestos survey, resident areas, etc.)



Response - Key Themes

- + Immediate actions and priorities.
- + Continuity of operations; back-up systems.
- + Accounting for employees and visitors
- + Vital business documents.
- + Property damage.
- + Reporting of injuries.



External Threat

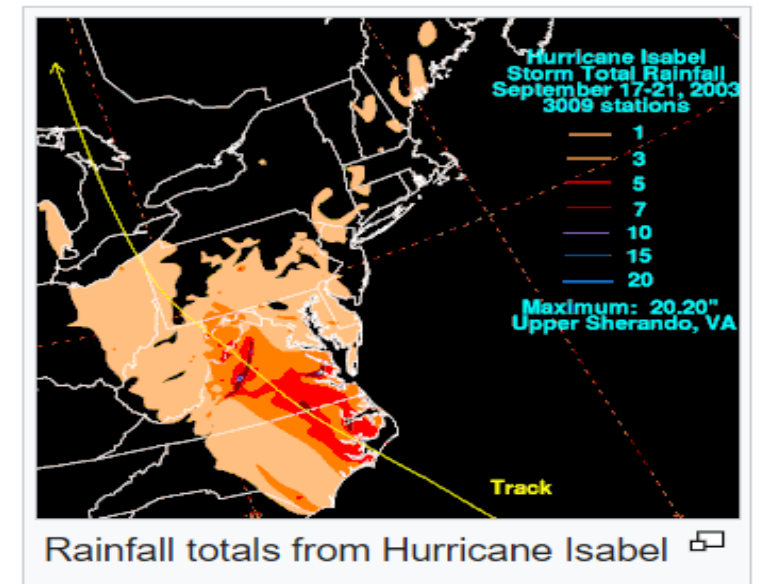
Flowing water is one of nature's most powerful forces. It can literally move tons of soil within seconds and move buildings off of their foundations

A person swept away by fast-moving water has a slim chance of survival. The average speed of flood water is 6 to 12 miles per hour.



External Threat – Response

- + Assemble your team, assess the threat, and determine the timeframe.
- + Build dikes and berms or take other actions to prevent the water from entering additional areas.
- + Work with local authorities and the Office of Emergency Management.
- + If an advanced warning is available, prepare residents, supplies, and staff for evacuation out of the facility, or to safe areas of the facility, if directed.



External Threat – Response



- + Attempt to block / re-direct the source of the water.
- + Shut down electrical power to areas of the building.
- + Secure any environmental contaminants.
- + Secure any portable oxygen cylinders.
- + Ensure any storage tanks in the area that could be flooded are either anchored securely or removed.
- + Contact local vendors/contractors for clean-up of contaminated silt, debris, oil, chemicals, water, mildew, etc.

External Threat – Response

- + Check for gas leaks, water line ruptures, sewage contamination, etc.
- + If you smell gas, and it is safe to do so, shut off the gas.
- + Be aware of any public health notices regarding water contamination
- + Notify the local response authorities and the State Licensing Authority to report an unusual occurrence and activation of the facility's EOP.

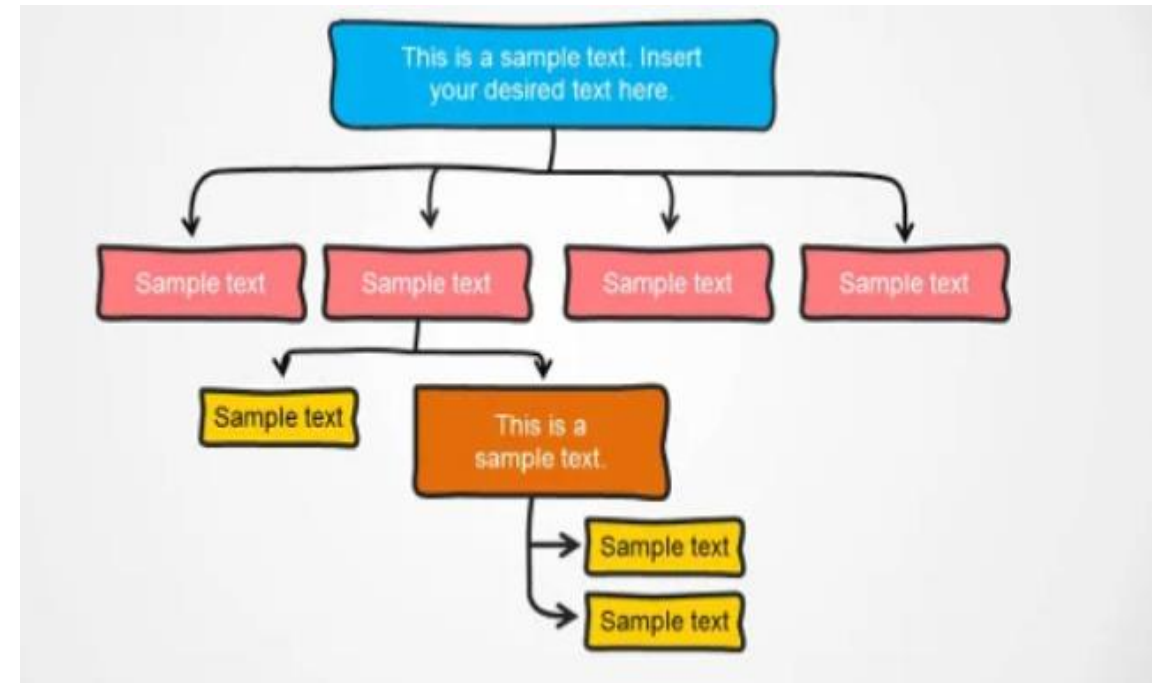


BOIL WATER
Advisory in Effect



Incident Command - Communications

- + How often are call trees or other mass-communication mechanisms (i.e., electronic notification systems) updated/validated at each facility?
- + Who has access to this notification system (if applicable)?



Recovery

The three stages of Disaster Recovery include:

- + Immediate Recovery: Quick Turnaround
- + Long-Term Temporary Recovery: Internal v. External Relocation.
- + Full Recovery: The return of the facility to its pre-disaster conditions.



Incident Command – First 24 Hours

- + Contingency planning based on weather updates.
- + Emergency notifications and communications.
- + Process for accounting for employees and visitors.
- + Decision-making and decision-makers.

FIRST 24 HOUR CHECKLIST

NOTE: The following actions help your staff begin the cleanup process. Professional cleaners have the equipment necessary to quickly remove large volumes of water and properly clean and treat buildings and furnishings. Professional equipment restorers bring the experience and resources to effectively clean and repair electronic equipment and get it recertified, if necessary.

BUILDING	EQUIPMENT
<ul style="list-style-type: none"> ➤ Remove wet items such as carpeting, padding & ceiling tile, to exterior location. ➤ Use available and rented vacuum equipment to eliminate water. Also use squeegees and mops. ➤ Set up any available dehumidifiers (if outside temperature is >60° F). ➤ Open any doors and windows to help reduce humidity (if weather is appropriate). ➤ Use fans to help circulate air and assist drying. ➤ Open drawers and closet doors to enhance drying. ➤ Place non-staining blocks or aluminum foil under furniture legs. ➤ Lift draperies off carpet and suspend. ➤ Move photos, painting and art objects to a safe, dry location. ➤ Remove damp books from shelves and spread out in a stable, dry environment. ➤ Leave the heat on if damage occurs during a cool season. Utilize air conditioning if it occurs during a warm season. 	<ul style="list-style-type: none"> ➤ Turn off power immediately! Do not energize wet equipment. ➤ Do not re-energize equipment until authorized by qualified restoration personnel or the manufacturer's technical representative. ➤ Open cabinet doors/side panels/covers/ chassis drawers – drain all water. ➤ Remove equipment to a cool, dry area after wiping down and eliminate as much moisture and contaminants as possible. ➤ Set up fans to move ambient air through the equipment. ➤ Blow water out with clean compressed air (or preferably liquid nitrogen). ➤ Spray water displacement solvent on electronic components (such as contact cleaner, LPS 1, or alcohol/Freon mixture). ➤ Wipe down and dry metal surfaces as soon as possible – use protective surface treatments to slow corrosion (CRC, LPS 1). ➤ Follow up with professional restoration services.
RECORDING EQUIPMENT (back-up drives)	MAGNETIC MEDIA
<ul style="list-style-type: none"> ➤ Do not operate if wet or dirty. ➤ Clean tape transport mechanism with alcohol solvents – dry out if wet. ➤ Wipe off surface contamination before drive system use. ➤ Treat electronics as detailed above. ➤ Do not re-energize equipment until authorized by qualified restoration personnel or the manufacturer's technical representative. ➤ Follow up with professional restoration service. 	<ul style="list-style-type: none"> ➤ Do not use if wet or dirty. ➤ Clean and dry dirty tapes/disks / cassettes with alcohol-based solvents for one time data recovery. ➤ Send wet head disk assemblies (HDAs) to a specialist for data recovery. ➤ Save the data – not the media. ➤ Follow up with professional restoration service.

Damage Assessments

- + Checklists are helpful.
- + Evaluate Structure and Utilities: Maintenance, with special support (i.e.: Architect and/or Structural Engineering).
- + Department Heads should assess their own areas and provide a report to the Command Center.

Note: If the facility is severely damaged, residents may have to be evacuated to allow the facility to recover fully.



Recovery

- + Structure has been surveyed and has been declared safe.
- + Utilities have been returned to normal operation.
- + Food Services have been inventoried and foods and liquids have been found to be adequately stocked.
- + Resident Services have been reviewed.
- + Information Technology has been reviewed and has been approved.
- + Staffing has been reviewed and has been found adequate to return to normal operation.



Questions?





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