

Gulf-7

Pediatric Disaster Care Center of Excellence

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Speaker Disclosures

I have no relevant financial relationships with manufacturers of any commercial products and/or providers of commercial services discussed in this CME activity.

The Gulf 7 Pediatric Disaster Network (G7) was supported by Award Number [6 U3REP220671-01-01] from the Office of the Assistant Secretary for Preparedness and Response (ASPR)

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

I have not used artificial intelligence in the development of this presentation.

Speaking and thinking about disasters may cause discomfort or stress

Emergency managers use a lot of acronyms



Objectives

- At the conclusion of this activity, learners will be able to:
 - Identify the participants within the Gulf-7 Pediatric Disaster Network
 - Explain the disaster management cycle
 - Apply a hazard vulnerability assessment tool to their practice

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Case Presentation

Significant amounts of rainfall occur across the Midwest region. Rivers, streams, creeks, and lakes are all nearing record levels. Flooding is imminent in many communities along the Mississippi River. One community issues a mandatory evacuation for all residents. The hospital and three long term care facilities (one of which provides services to children with special health care needs/ children with functional access needs) are all located in lower lying areas of the town and will need to be evacuated.

Considerations:

1. Clinical care for children in this community
2. Patient movement from this community
3. Business continuity
4. Return to normal

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What is a Disaster?

Any event that overwhelms the available resources

- Hostile events
- Weather events
- Infrastructure and support systems destroyed
- Accidents
- Medical surges

Unique Needs of Children During Disasters

- Motor skills
- Cognitive decision-making
- Appropriately sized equipment
- Appropriate medications
- Physiologic differences (thinner skin, faster breathing)
- Susceptibility to dehydration
- Sensitivity to changes in body temperature
- Psychological vulnerabilities
- No photo ID, risk of separation from family



Planning for Disasters

- Disaster plans are required in all hospitals
 - Current state and local disaster plans often do not include specific considerations for children and families
 - Complex needs of children with special health care needs are often overlooked
- How many ambulatory practices have a disaster plan?

- Three cooperative agreements awarded
 - Pilot creation of pediatric disaster care centers of excellence
 - Improve disaster response capabilities for children in the United States



Pediatric Disaster Care Centers of Excellence

- Tasked with
 - Developing or improving capability and capacity to provide highly specialized care to pediatric patients within and outside region
 - Defining the delivery of pediatric clinical care when existing systems become stressed or overwhelmed
 - Ensuring the needs of all pediatric patients, including children with special health care needs, along with parents and caregivers are considered and integrated into the PDC COE plans and operations



Helping children
navigate the
storms of life on
the Gulf Coast
and beyond.





Mission

A collaborative network of healthcare providers committed to the development and implementation of best practices and resources for the care of children and families affected by disasters in the Gulf Coast region.



Vision

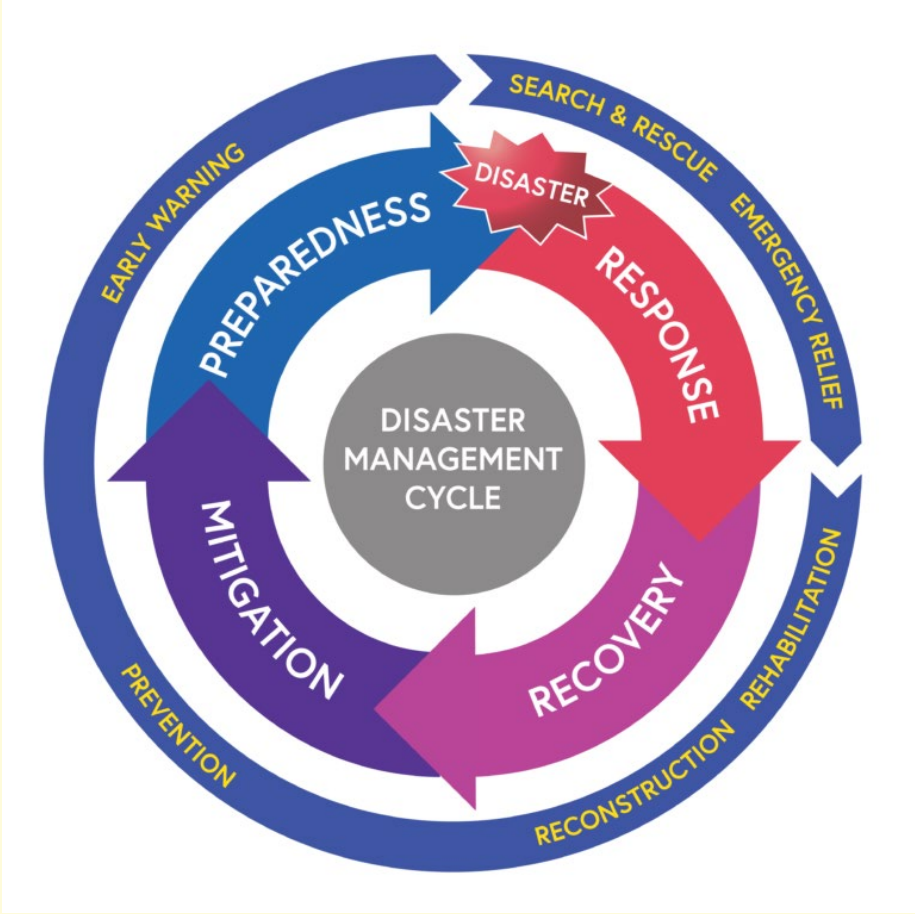
A future in which all healthcare providers in the Gulf Coast region have the knowledge, skills, and resources they need to provide exceptional care to children and families affected by disasters, and in which children and families in the region have access to high-quality care during times of crisis.



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7 million children





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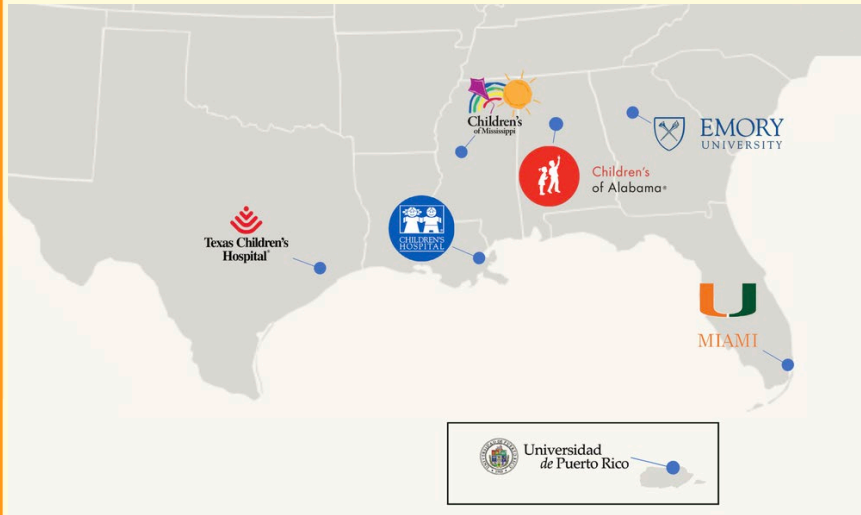


Share best practices at local/state/regional levels

- Telemedicine
- Evidence-based clinical guidelines
- Simulation education
- Drill scenario expertise
- Special care units



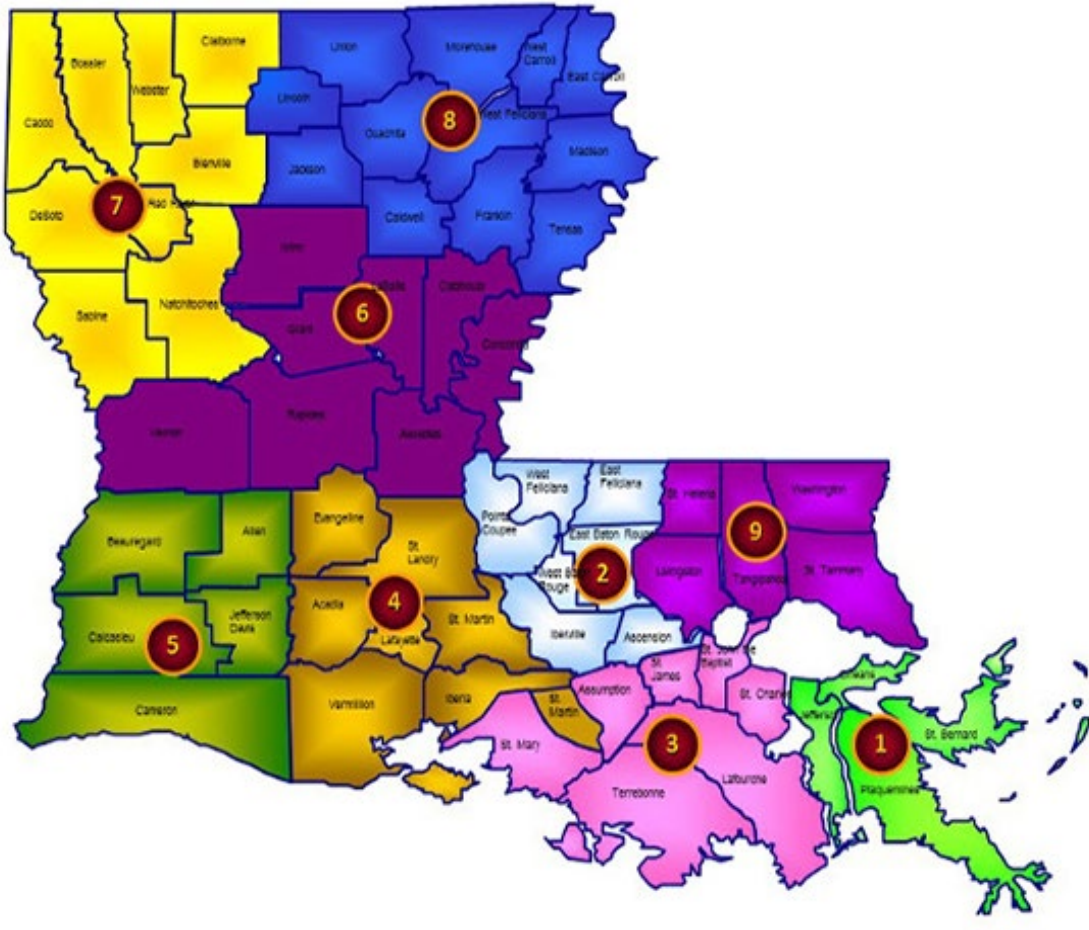
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Bring together private and public entities

- Regional healthcare coalitions
- Emergency medical services
- Public health and emergency managers
- Representatives from AAP, Emergency Nurses Association, American College of Emergency Physicians

Regional Health Care Coalitions (HCC)




Designated Regional
Coordinators

Gulf-7 Activities

- Pediatric Preparedness for the Healthcare Professional courses
 - 2 days, 15 hours of CME, CNE, CE
 - August 2023 (New Orleans)
 - July 2024 (Shreveport)
 - October 2024 (Jackson, MS)
- Regional virtual tabletop drill simulating mental health needs following a disaster
- Provided materials for hospital tabletop MCI drill (New Orleans)



Gulf-7 Activities

- Survey of deployable teams
 - Creation of training materials for Pediatrics residents
 - Collaboration on assessment of children's hospitals
- 

Being Prepared is KEY!



We can have the best plans, the best training, the best exercises...

but nothing will work unless everyone takes some time to be personally prepared!

AAP Family Readiness Kit

- 1. Build a kit
 - Food, clothes, personal documents, medicines
- 2. Make a Plan
 - Communication, Transportation, & Reunification plans
- 3. Be Informed
 - Plan with friends, neighbors, identify special skills & needs
 - Battery powered weather radio, identify regional risks
- 4. Get Involved
 - Test smoke alarms - involve your kids!
 - Talk with kids, teachers, school about disaster plans
 - Practice Family Disaster Plan
 - Take First Aid & CPR class



Hazard Vulnerability Analysis

- Tool used to rank potential incidents based on:
 - Frequency
 - Perceived threat
 - Response readiness

Hazard Vulnerability Analysis

DEFINITIONS		Likelihood This Will Occur
SCALE		<p>0 = N/A Never happened here Could not happen here</p> <p>1 = Low Has happened here Could happen here Has happened nearby</p> <p>2 = Moderate Has happened here or nearby (Houston metro and surrounding areas) in last 5-10 yrs.</p> <p>3 = High Has happened here within the last year (within TMC) Expect to occur annually</p>
EVENT	EVENT TYPE	PROBABILITY
Active Shooter	Man-Made Disaster	3

Hazard Vulnerability Analysis

<i>Possibility of Injury or Death</i>	<i>Physical Losses & Damages</i>	<i>Interruption of Services</i>
<p><u>0 = N/A</u> Has no human impact</p> <p><u>1 = Low</u> May have minor impact (bumps, bruises, scrapes)</p> <p><u>2 = Moderate</u> May have major impact (broken bones, respiratory distress)</p> <p><u>3 = High</u> May cause death</p>	<p><u>0 = N/A</u> Has no property impact</p> <p><u>1 = Low</u> May have minor impact (less than insurance deductible)</p> <p><u>2 = Moderate</u> May have major impact (more than insurance deductible)</p> <p><u>3 = High</u> May completely destroy property (irreparable)</p>	<p><u>0 = N/A</u> Has no business impact</p> <p><u>1 = Low</u> May have minor impact (limits support services)</p> <p><u>2 = Moderate</u> May have major impact (limits direct patient care services)</p> <p><u>3 = High</u> May completely immobilize patient care services</p>
HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT
3	1	3

Hazard Vulnerability Analysis

<i>Preplanning</i>	<i>Time, Effectiveness, Resources</i>	<i>Community/ Mutual Aid, Supplies</i>	<i>Relative threat*</i>
<p>1 = High Amount of Preparedness is High 2 = Moderate Amount of Preparedness is Moderate 3 = Low or none Amount of Preparedness is Low or None</p>	<p>1 = High Internal Response capabilities are High 2 = Moderate Internal Response capabilities are Moderate 3 = Low or none Internal Response capabilities are Low or None</p>	<p>1 = High External response is readily available 2 = Moderate External response is available, but may take time 3 = Low or none External response may be delayed or is not available</p>	0 - 100%
PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	
3	1	1	67%

Hazard Vulnerability Analysis

- Select potential disasters
- Members of practice/organization pull together past experience or history of events and make educated estimations of risk


- Calculate the Risk level as follows:

Probability X Sum of other values

3

18

- Reflect on the elements of the HVA tool
 - What increases risk, what decreases risk?



Preparing Yourself Preparing Your Clinic

The Four S's



The Four S's



- Space
- Staff
- Stuff
- Systems

Space

- What kind of damage can be expected?
 - How can it be mitigated?
 - What will repairs look like?
 - What restrictions might mitigation cause on operations during the disaster?
- Do you need to create an alternate care site?



Staff

- What are your plans during and following the immediate event?
 - Who will work after the storm?
 - Is your staff evacuating?
 - What is their expected return time?



Stuff

- What resources will be available/limited and for how long?
 - Does it involve evacuation?
 - Does it involve hardening of homes, buildings, other property?
 - Does it involve moving vaccine storage?



Systems

- Do you have a disaster plan?
- When will you activate your plan?
- Do you have plans in place to communicate with your staff and patients?



MOC Questions in Slido (3 slides)

- Chapter staff will add these slides to your presentation once
- You conduct a hazard vulnerability assessment at your practice and determine that based upon probability and magnitude, your highest risk is loss of access to the electronic health record. This is an example of which step in the disaster management cycle?
 - Preparedness
 - Response
 - Recovery
 - Mitigation

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MOC Questions in Slido (3 slides)

- Chapter staff will add these slides to your presentation once
- The “Four S’s” of emergency preparedness are:
 - Space, Staff, Satellite phones, Systems
 - Supervision, Staff, Stuff, Systems
 - Space, Staff, Stuff, Systems
 - Space, Staff, Stuff, Surgeons

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Summary



- Emergency Preparedness = preparing for disasters
 - Personal plan
 - Practice plan
 - Hospital plan
 - Regional plan
- Gulf-7 Pediatric Disaster Care Center of Excellence
 - Bringing together public and private entities
 - Developing best practices for the care of children and families affected by disaster
 - Creating and/or sharing resources across the region

Action Items

- HVA
- Make contact with regional healthcare coalition

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References and additional reading

The screenshot shows the American Academy of Pediatrics (AAP) website. The top navigation bar includes links for AAP Home, Policy, Advocacy, PediaLink, Patient Care, Practice Management, Community, Healthy Children, shopAAP, Create Account, and Login. The main header features the AAP logo and a search bar labeled 'Search All AAP'. Below the header, the 'Patient Care' section is highlighted, with sub-links for Early Childhood, Gun Safety & Injury Prevention, and Mental Health Initiatives. The main content area is titled 'Disasters and Children' and includes a breadcrumb trail: Home / Patient Care / Disasters and Children. A photograph shows two children in winter coats standing in a field of debris. To the right of the photo, text reads: 'Children are more vulnerable than adults in disasters and public health emergency situations, and they have specific needs for customized disaster planning. Pediatricians can use these resources, recommendations and tools to be better prepared to support and care for children affected by disasters.' A 'Feedback Form' button is visible on the right side of the page.

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References and additional reading

- Gulf 7 Pediatric Disaster Network
<https://emscimprovement.center/domains/preparedness/asprcoe/gulf7/>
- Kaiser Permanente HVA tool
<https://asprtracie.hhs.gov/technical-resources/resource/250/kaiser-permanente-hazard-vulnerability-analysis-hva-tool>
- AAP Pediatric Tabletop Exercise Resource Kit
<https://www.aap.org/en/patient-care/disasters-and-children/pediatric-tabletop-exercise-resource-kit/>

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Acknowledgements

- Brent Kaziny, MD
 - Texas Children's Hospital
 - Gulf-7 PDC COE principal investigator

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