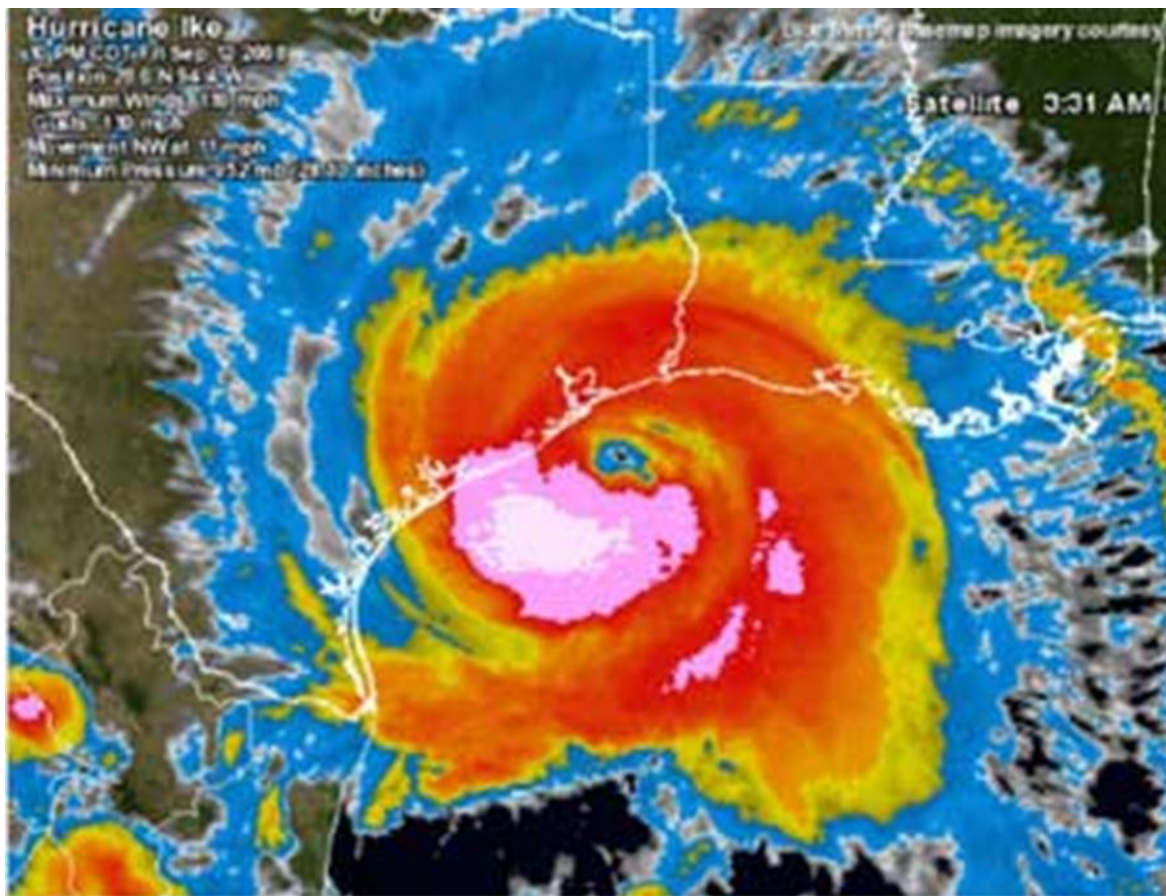




HURRICANE ABYSS RESPONSE TABLETOP EXERCISE



After Action Report and Improvement Plan (AAR-IP)

The After-Action Report and Improvement Plan (AAR/IP) summarizes exercise information required for preparedness reporting and trend analysis by aligning exercise objectives with preparedness doctrine, related frameworks, and national guidance. This information is compiled into recommendations and corrective actions in the improvement plan to improve local and regional preparedness, response, and recovery activities.

EXERCISE OVERVIEW

Exercise Name	Hurricane Abyss Tabletop Exercise 2024
Exercise Date	April 5, April 26, May 8, May 10, and June 7, 2024
Scope	This is a Tabletop exercise planned to occur during Corridors' monthly meetings. Healthcare systems' inclement weather and hurricane plans will be discussed, as well as procedures for evacuation and recovery systems. Exercise play is limited to meeting participants.
Mission Area	Preparedness, Response, and Recovery
Capabilities	<ul style="list-style-type: none">• Capability 2: Health Care and Medical Response Coordination• Capability 3: Continuity of Healthcare Service Delivery• Capability 4: Medical Surge
Objectives	<ul style="list-style-type: none">• Evaluate evacuation and shelter-in-place policies and procedures in anticipation of a major weather event, including patient tracking and receiving.• Identify coordination and communication methods used to mitigate the effects of a hurricane.
Hazard	Hurricane
Scenario	A major hurricane is expected to impact the Texas Gulf Coast within 96 hours. Impacts may be experienced across Trauma Service Areas H, Q, and R.
Sponsor	Hospital Preparedness Program (HPP) Regional Healthcare Preparedness Coalition (RHPC) Southeast Texas Regional Advisory Council (SETRAC)
Primary Audience	This exercise is intended to test acute care facilities, first responder agencies, local emergency management, and public health agencies in their ability to respond to and cope with a hurricane.

Exercise Name

Hurricane Abyss Tabletop Exercise 2024

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EXERCISE SCENARIOS

A major hurricane is expected to impact the Texas Gulf Coast within 96 hours. Impacts may be experienced across Trauma Service Areas H, Q, and R.

Exercise Inject 1: H-96 to H+72

Hurricane Watch in effect for SE Texas. Storm Surge Watch in effect for coastal areas! Hurricane Abyss, currently a Category 2 hurricane, is anticipated to strengthen to a Category 5 prior to making landfall. Forecast track somewhat uncertain, but a landfall between Sargent and High Island is most likely. Looking at the forecast cone, it could reach the Texas coast early Wednesday, with tropical storm winds reaching the coast as early as Tuesday night. Life threatening surge and wind likely with this hurricane across SE Texas and along Galveston Bay.

Exercise Inject 2: H-72 to H-12

Abyss strengthens to a category 4 Hurricane as it continues towards SE Texas. Wind speeds are at 150 mph with gusts reaching 175 mph. It is expected that Tropical Storm force winds will reach the coast 12-18 hours out.

Exercise Inject 3: Post-Hurricane

Following landfall, the center of circulation proceeded over Rosenberg, Sealy, and Brenham, then continued northward along Highway 36. The storm sustained wind speeds of 96-110 mph (Category 2 Hurricane) as it passed over Waco and Fort Worth before veering more towards the northeast, headed for Oklahoma. Extensive property and infrastructure damage has been identified along the track and east of the storm. Many facilities in the hurricane's path are reporting major damage and do not expect to be operational for at least 36 hours.

CAPABILITY PERFORMANCE RATINGS

Aligning exercise objectives and preparedness capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis nationwide. The core capabilities include Operational Coordination, Critical Transportation, Public Health and Medical Services, and Mass Care Services; however, the table below include performance ratings for each Health Care Preparedness and Response capability objective written by the planning team and observed with average ratings based on the evaluator notes during the exercise.

Table 1: Summary of Health Care Preparedness & Response Capability Performance Ratings

Capability	Exercise Objectives	Rating
Health Care and Medical Response Coordination	Evaluate evacuation and shelter-in-place policies and procedures in anticipation of a major weather event, including patient tracking and receiving.	S
Healthcare and Medical Response Coordination	Identify coordination and communication methods used to mitigate the effects of a hurricane.	S
Continuity of Healthcare Service Delivery	Evaluate evacuation and shelter-in-place policies and procedures in anticipation of a major weather event, including patient tracking and receiving.	S
Medical Surge	Identify coordination and communication methods used to mitigate the effects of a hurricane.	S

Ratings Definitions:

- Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
- Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

ANALYSIS OF CAPABILITY OBJECTIVES

This section provides a summary of observations for each objective evaluated with its corresponding capability. The observations are compiled below as either strengths or areas for improvement with an analysis of factors identified and discussed by participants, then recorded by exercise evaluators.

Capability 2: Health Care and Medical Response Coordination

Objective:

1. Evaluate evacuation and shelter-in-place policies and procedures in anticipation of a major weather event, including patient tracking and receiving.
2. Identify coordination and communication methods used to mitigate the effects of a hurricane.

Strengths:

- Working with Regional Partners
- Use of mass communication systems to communicate information to staff
- Multiple methods of communication throughout the region
- Understanding of the process for requesting resources

The following areas of improvement are required to achieve the full capability level:

Areas for Improvement:

- Number of staff trained in utilization of alternate communication devices
 - **Analysis:** Few training opportunities throughout the region
- Defined trigger points for decisions on shelter-in-place or evacuation
 - **Analysis:** Lack of understanding of multiple severe weather potential impacts
- Sufficiency of the 96 hour plan
 - **Analysis:** Facility calculate 96-hour supplies based on normal daily activities in comparison to disaster driven calculations

Capability 3: Continuity of Healthcare Service Delivery

Objective:

1. Evaluate evacuation and shelter-in-place policies and procedures in anticipation of a major weather event, including patient tracking and receiving.

Strengths:

- Early notification and collaboration with partners and staff to ensure resource availability prior to storms arrival
- Communication and exercise development with IT service, fuel, food, and water vendors to maintain 96-hour cache
- Pre landfall facility checks to maintain integrity post landfall

Areas for Improvement:

- Lack of understanding of Continuity of Operations Plans
 - **Analysis:** Few training opportunities throughout the region
- Having primary, secondary, and tertiary vendor agreements
 - **Analysis:** Lack of understanding of vendor commitments throughout the region
- Understanding of state regulations impact on Business Continuity Plans
 - **Analysis:** Lack of understanding of state regulations in the event of Hospital closure

Capability 4: Medical Surge

Objective:

1. Identify coordination and communication methods used to mitigate the effects of a hurricane.

Strengths:

- Understanding of capabilities within the region
- Regional technology trainings
- Notification technologies
- Regional coordination

Areas for Improvement:

- Load balancing of Mental Health Patients throughout region
 - **Analysis:** Lack of Mental Health facilities throughout the region and communication with facilities within the region for better load balancing of patients
- Collaboration with Dialysis Centers
 - **Analysis:** Lack of understanding of Dialysis and Hospital plans during inclement weather events

APPENDIX A: REGIONAL IMPROVEMENT PLAN

This Improvement Plan (IP) was developed with the following recommendations and corrective actions for the Regional Healthcare Preparedness Coalition (RHPC) based on the Hurricane Abyss Tabletop conducted on April 5, April 26, May 8, May 10, and June 7, 2024

Capability	Recommendations	Corrective Actions	Capability Element	Responsible Party	Projected Completion Date
Healthcare and Medical Response Coordination	More training and education for inclement weather response and plans	Identify Training/educational opportunities to increase awareness of inclement weather hazards to present at corridor meetings	Training & Planning	Individual facilities, SETRAC Training & Exercise	On-going
Continuity of Healthcare Service Delivery	More training and education for Continuity of Operations throughout the region	Revamp and deliver healthcare COOP planning course throughout the region	Planning	Individual facilities, SETRAC Training & Exercise	On-going
Medical Surge	Continued review and revision of facility surge plans and development of Mental Health initiative	Additional education on utilization of technological platforms and continued regional coordination on Mental Health initiative	Training & Planning	Individual facilities, SETRAC Training & Exercise	On-going

Authorizing Signature: _____

Date: _____

PARTICIPATING ORGANIZATIONS

Advanced Diagnostics Healthcare System
Allegiance Mobile Health
Baptist Hospital of Southeast Texas
Baylor St. Luke's Medical Center
Ben Taub Hospital
Bonaparte UTHealth
Chambers County OEM
Chambers County Public Health
Chambers County Emergency Services
CHI St. Luke's Lufkin
CHI St. Luke's Memorial Livingston
CHI St. Luke's Memorial San Augustine
CHI St. Luke's the Woodlands
CHI St. Luke's the Vintage
Christus St. Elizabeth
Columbus Community
Deep East Texas RAC
Deerbrook Skilled Nursing and Rehabilitation
Devotion Hospice
Elite Hospital Kingwood
Fort Bend County OEM
Hardin County Health Service
Harris County Public Health
HCA Houston Healthcare Kingwood
HCA Houston Healthcare Medical Center
HCA Houston Healthcare Northwest
HCA Houston Healthcare North Cypress
HCA Houston Healthcare Southeast
HCA Houston Healthcare Tomball
Hemphill Care Center
Houston Health Department
Houston Hospice
Houston Methodist Baytown
Houston Methodist Sugarland
Houston Methodist TMC
Houston Methodist Willowbrook
Houston Methodist West
Hospice in the Pines
Huntsville Memorial Hospital
Jasper Memorial Hospital
Jasper-Newton Public Health District
Kindred Hospital Clear Lake
Kindred Hospital Northwest
Liberty Dayton Regional Medical Center
Lonestar Behavioral Health
MD Anderson Cancer Center
Memorial Hermann Cypress
Memorial Hermann Greater Heights
Memorial Hermann Katy
Memorial Hermann Memorial City
Memorial Hermann Northeast
Memorial Hermann Pearland
Memorial Hermann Southeast
Memorial Hermann Southwest
Memorial Hermann the Woodlands
Memorial Hermann TMC
Montgomery County Public Health
Nacogdoches County EMS
Nacogdoches Medical Center
Nacogdoches Memorial Hospital
Oak Bend Medical Center
Piney Woods Home Health
Pinecrest Retirement
Port Arthur Public Health
Sabine County Hospital
Shriners Children's
Texas Children's Hospital TMC
Texas Children's Hospital West
Texas Children's Hospital the Woodlands
Texas Department of State Health Services
The Medical Center of Southeast Texas
TIRR Memorial Hermann
Total Point ER
TOPS Surgical Specialty Hospital
Tyler County Hospital