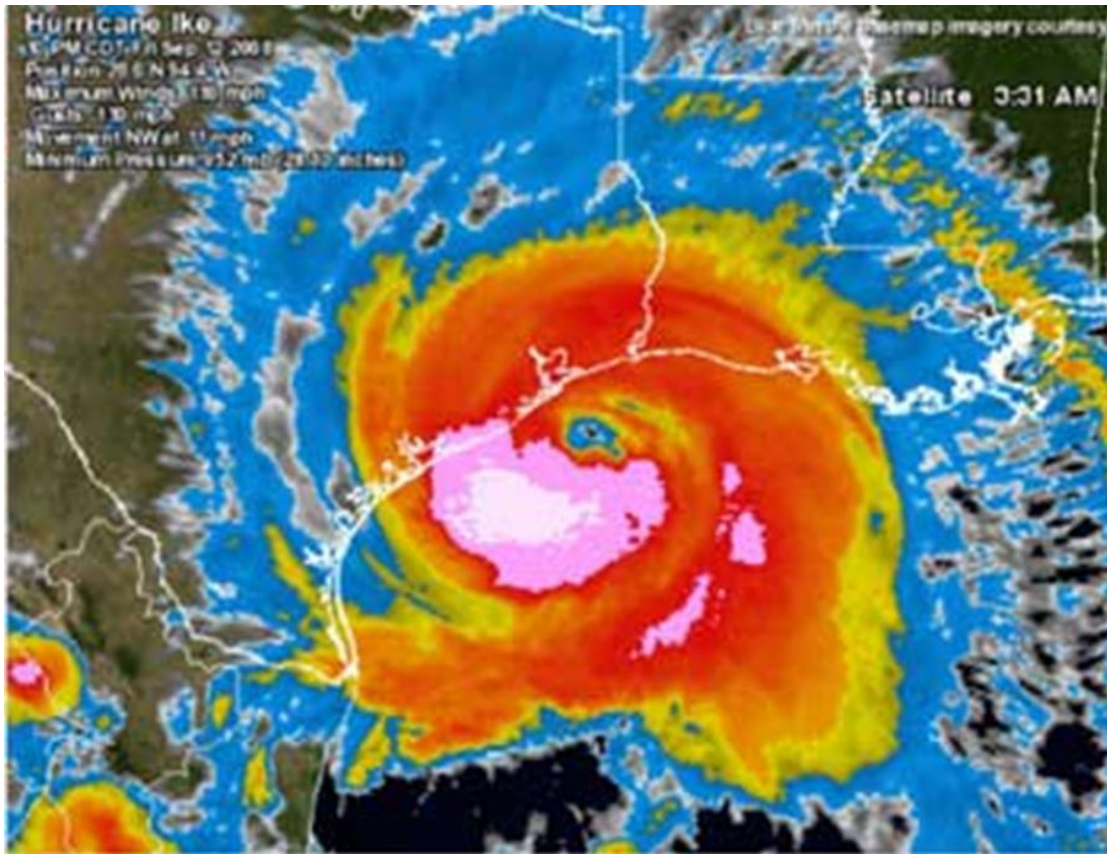




# HURRICANE ABYSS FUNCTIONAL EXERCISE 2024



## 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

<b>Exercise Name</b>	Hurricane Abyss
<b>Exercise Date</b>	May 23, 2024
<b>Scope</b>	This exercise is a functional exercise, planned for May 23, 2024, at SETRAC, CMOC. Exercise play is limited to CMOC staff on site and participating facilities at their respective locations.
<b>Mission Area</b>	Response
<b>Capabilities</b>	<ul style="list-style-type: none"><li>• Capability 1: Foundation of Healthcare and Medical Response</li><li>• Capability 2: Health Care and Medical Response Coordination</li><li>• Capability 4: Medical Surge</li></ul>
<b>Objectives</b>	<ul style="list-style-type: none"><li>• CMOC demonstrates its capability to efficiently share information across various roles in response to a hurricane based upon CMOC Basic Plan.</li><li>• CMOC demonstrates the ability to effectively organize/coordinate patient transports and balance loads promptly in response to patient surge and evacuations in response to a hurricane based upon CMOC Basic Plan.</li><li>• CMOC demonstrates its capability to efficiently deliver clear and concise messages to facilities in response to a hurricane based upon CMOC Basic Plan.</li><li>• CMOC ensures facilities are informed about whom to contact for information and how to request resources or assistance in response to a hurricane based upon CMOC Basic Plan.</li><li>• CMOC ensures facilities utilize EM Resource, EM Track, and Web EOC with minimal difficulty in response to a Hurricane based on CMOC Basic Plan.</li></ul>
<b>Hazard</b>	Hurricane
<b>Scenario</b>	A major hurricane is expected to impact the Texas Gulf Coast within 72 hours. Impacts may be experienced across Trauma Service Areas H, Q, and R.
<b>Sponsor</b>	SETRAC HPP

**Exercise Name**

Hurricane Abyss

**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 manage a major weather event.

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## EXERCISE SCENARIOS

A major hurricane is expected to impact the Texas Gulf Coast within 72 hours. Impacts may be experienced across Trauma Service Areas H, Q, and R.

## 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
Foundation for Healthcare and Medical Readiness	CMOC ensures facilities utilize EM Resource, EM Track, and Web EOC with minimal difficulty in response to a Hurricane based on CMOC Basic Plan.	S
Healthcare and Medical Response Coordination	CMOC demonstrates the ability to effectively organize/coordinate patient transports and balance loads promptly in response to patient surge and evacuations in response to a hurricane based upon CMOC Basic Plan.	S
Healthcare and Medical Response Coordination	CMOC demonstrates its capability to efficiently deliver clear and concise messages to facilities in response to a hurricane based upon CMOC Basic Plan.	S
Healthcare and Medical Response Coordination	CMOC ensures facilities are informed about whom to contact for information and how to request resources or assistance in response to a hurricane based upon CMOC Basic Plan.	S
Healthcare and Medical Response Coordination	CMOC demonstrates its capability to efficiently share information across various roles in response to a hurricane, based upon CMOC Basic Plan.	S
Medical Surge	CMOC demonstrates the ability to effectively organize/coordinate patient transports and balance loads promptly in response to patient surge and evacuations in response to a hurricane based upon CMOC Basic Plan.	S

Capability	Exercise Objectives	Rating
Medical Surge	CMOC ensures facilities are informed about whom to contact for information and how to request resources or assistance in response to a hurricane based upon CMOC Basic Plan	S
<p><b>Ratings Definitions:</b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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).</li> </ul>		

## 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 1: Foundation of Healthcare and Medical Response

**Objective:**

1. CMOC ensures facilities utilize EMResource, EMTrack, and WebEOC with minimal difficulty in response to a Hurricane based on CMOC Basic Plan.

**Strengths:**

- Capability to advise the region on the correct process for asset requests.
- Skill in utilizing technological platforms to provide region-wide updates on current situations and situational awareness.
- Timely utilization of technological platforms to gather hospital bed status information, facilitating appropriate patient movement across the region as necessary.

#### **Areas for Improvement:**

- The STAR process experienced delays due to a combination of system bugs and insufficient training among CMOC personnel.
  - **Analysis:** There were issues with the WEBEOC system's routing of STAR requests to the correct entities. Additionally, frequent staff turnover and a lack of understanding of the workaround process to locate STAR request contributed to the delays.
- STAR requests were delayed because they were difficult to locate.
  - **Analysis:** There was a lack of understanding the need to capture the STAR Number when placing request, making it difficult for CMOC staff to find the request.

### **Capability 2: Health Care and Medical Response Coordination**

#### **Objective:**

1. CMOC demonstrates the ability to effectively organize/coordinate patient transports and balance loads promptly in response to patient surge and evacuations in response to a hurricane based upon CMOC Basic Plan.
2. CMOC demonstrates its capability to efficiently deliver clear and concise messages to facilities in response to a hurricane based upon CMOC Basic Plan.
3. CMOC ensures facilities are informed about whom to contact for information and how to request resources or assistance in response to a hurricane based upon CMOC Basic Plan.

#### **Strengths:**

- Effective communication among partners and CMOC within the healthcare system facilitated the identification of appropriate patient movements throughout the region.
- Organized communication among CMOC positions ensured clear delivery of plans throughout the region.

### Areas for Improvement:

- Identification and incorporation of trained staff for rotation in Command Staff Positions
  - **Analysis:** Major turnover in staff who held critical positions, as well as the lack of sufficient training and tailored drills for specific functions and processes during CMOC activations, were identified as contributing factors.
- Facilities lack of understanding of CMOCs role throughout the region.
  - **Analysis:** Also identified as a contributing factor, personnel turnover at facilities contributed to lack of training and education on CMOCs roles and plans throughout the region
- Failure to forward information to other positions within the CMOC.
  - **Analysis:** Calls not consistently reaching the intended recipient and a lack of understanding about CMOC operations resulted in a situation where information was withheld instead of being passed on to the appropriate parties.

## Capability 4: Medical Surge

### Objective:

1. CMOC ensures facilities are informed about whom to contact for information and how to request resources or assistance in response to a hurricane based upon CMOC Basic Plan.
2. CMOC ensures facilities utilize EMResource, EMTrack, and WebEOC with minimal difficulty in response to a Hurricane based on CMOC Basic Plan.

### Strengths:

- The use of technological platforms enabled a robust response to medical surges across the region.
- Experienced leaders guided the organization and facilitated patient movement throughout the region.
- Up-to-date briefings helped with load balancing throughout the healthcare system.

### Areas for Improvement:

- Communication of medical surge plan and roles throughout the region
  - **Analysis:** Regional partners identified a gap in understanding how roles and responsibilities will evolve during an activation.
- Need to re-socialize the CMOC plans to the region.
  - **Analysis:** Participants highlighted the necessity for more frequent and in-depth training on incident response in the region.

**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 Functional Exercise conducted on May 23, 2024.

Capability	Recommendations	Corrective Actions	Capability Element	Responsible Party	Projected Completion Date
<b>Healthcare and Medical Response Coordination</b>	Increased education and drills throughout the year involving CMOC operations.	Develop Single-functioning drills that walk through a specific process in the CMOC from beginning to end.	Training & Planning	SETRAC Training & Exercise	On-going
<b>Foundation of Healthcare and Medical Response</b>	Enhanced training and education for CMOC positions	Revise the CMOC 101 course for delivery to staff, focusing on different positions throughout the year	Training & Planning	SETRAC Training & Exercise	On-going
<b>Medical Surge</b>	Provide additional education and training on SETRAC's role throughout the region.	Deliver the CMOC 101 course throughout the region, focusing on highlighting different CMOC plans	Training & Planning	SETRAC Training & Exercise	On-going

**Authorizing Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_



## PARTICIPATING ORGANIZATIONS

### Facility/Agency

Acadian EMS  
Altus Houston Hospital  
Altus Lumberton Hospital  
America's ER-Cypress  
Baptist Beaumont Hospital  
Beaumont Emergency Hospital  
CHG Cornerstone Hospital Conroe  
CHI St. Luke's Health Lakeside  
CHI St. Luke's Health Memorial -San Augustine  
CHI St. Luke's Health Memorial-Livingston  
CHI St. Luke's Health Memorial-Lufkin  
CHI St. Luke's Patients Medical Center  
CHI St. Luke's Springwoods Village  
CHI St. Luke's Sugar Land  
CHI St. Luke's The Woodlands  
Children's Memorial Hermann  
Christus Jasper  
Christus St. Elizabeth  
Christus St. Mary's Outpatient ER  
City of Houston Health  
City of Houston OEM  
City of Katy EOC  
City of Seabrook EOC  
City of Seabrook Fire Marshal  
ClearSky Rehab Hospital of Baytown  
Columbus Community Hospital  
DSHS 6/5 South  
El Campo Memorial Hospital  
Elite Hospital Kingwood  
Encompass Health Rehab Cypress  
Encompass Health Rehab Humble  
Encompass Health Rehab of Sugar Land  
Encompass Health Rehab Pearland  
Encompass Health Rehab The Woodlands  
Encompass Health Rehab Vision Park  
First Surgical Hospital  
Fort Bend HHS  
Gulf Coast Regional Blood Center  
Harris County Health & Medical Desk

HCA Houston Healthcare Clear Lake  
HCA Houston Healthcare Northwest  
HCA Houston Healthcare Southeast  
HCA Houston Healthcare Pearland  
HCA Houston Healthcare Tomball  
HCA Houston Healthcare West  
HCA Texas Orthopedic  
Houston Methodist Continuing Care  
Houston Methodist Sugar Land  
Houston Methodist The Woodlands  
Houston Methodist TMC  
Houston Methodist West  
Houston Physicians Hospital  
Huntsville Memorial Hospital  
Kindred Northwest  
Legent Hospital NW Houston  
Liberty Dayton Regional Medical Center  
Lyndon B. Johnson-Harris Health  
Matagorda Regional Medical Center  
Medical Center of SE TX  
Memorial Hemann Pearland  
Memorial Hermann Cypress  
Memorial Hermann Greater Heights  
Memorial Hermann Katy  
Memorial Hermann Katy Rehab  
Memorial Hermann Memorial City  
Memorial Hermann Northeast  
Memorial Hermann Pearland  
Memorial Hermann Rockets Orthopedic  
Memorial Hermann Southeast  
Memorial Hermann Southwest  
Memorial Hermann Sugar Land  
Memorial Hermann System  
Memorial Hermann Summer Creek Convenient Care  
Center  
Memorial Hermann Kingwood Convenient Care Center  
Memorial Hermann The Woodlands  
Memorial Hermann TIRR  
Memorial Hermann TMC  
Michael DeBakey VA Medical Center  
MidCoast Medical Center Bellville  
Montgomery County Public Health  
Nacogdoches Memorial Hospital  
Nexus Children's The Woodlands

Nexus Specialty Hospital-Shenandoah  
Oak Bend Medical Center  
Oak Bend Medical Center-Wharton  
Oak Bend Medical Center-Williams Way  
Omnipoint Health Hospital  
Orange County Health Services  
Palacios Community Medical Center  
PAM Health Clear Lake  
PAM Health Clear Lake North  
PAM Health Houston Heights  
PAM Health Humble  
PAM Health Sugar Land  
PAM Humble  
Parkside Surgery Center  
Patients ER & Hospital  
Rice Medical Center  
Riceland Medical Center  
River Oaks Hospital  
Sabine County Hospital  
Shriners Galveston  
Spring Hospital  
St. Joseph Medical Center  
St. Michael's Elite Hospital  
Sun Behavioral  
Surgery Specialty Hospitals of America  
Sweeny Community Hospital  
Texas Children's Hospital-Main  
Texas Children's Hospital-The Woodlands  
Texas Children's Hospital-West  
Texas Orthopedic Hospital  
The Heights Hospital  
The Woodlands Specialty Hospital  
TOPS Surgical Specialty  
Townsend Hospital  
Tyler County Hospital  
UT M.D. Anderson  
UTHealth Houston  
UTMB Galveston  
UTMB League City  
UTMB-Clear Lake  
Woodlands Spring Hospital