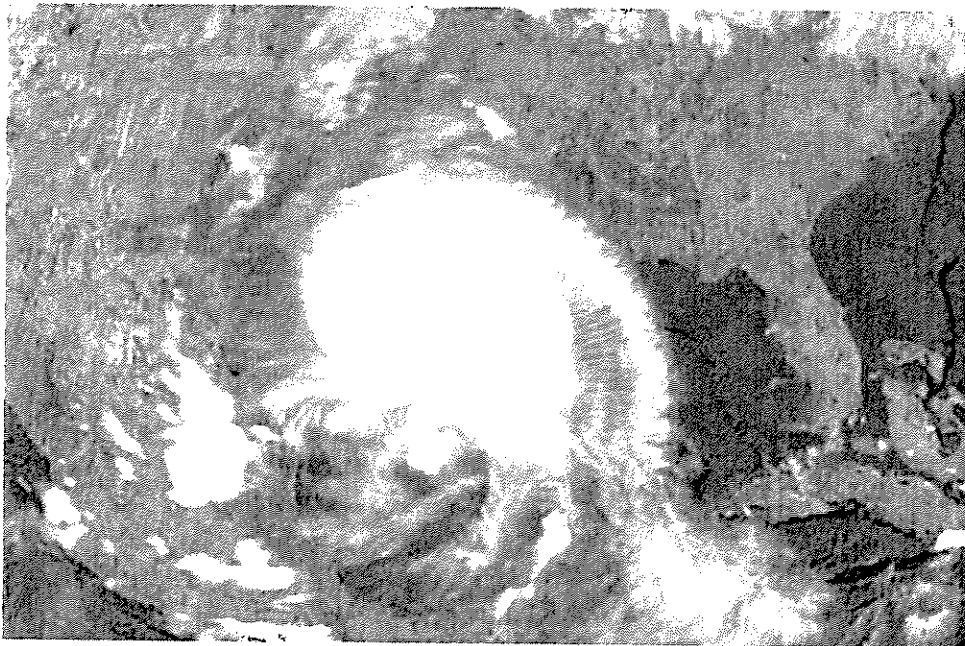


## Office of Emergency Preparedness

Hurricane Ike  
September 13, 2008



After – Action Report  
And  
Improvement Opportunities

Revised 12/15/2008

## Executive Summary

UTMB emergency management officials and executive leadership began tracking Hurricane Ike late in the week of September 1<sup>st</sup>, and participating in State Operations Center conference calls with the National Weather Service on Sunday September 7. Predicted paths varied from the lower Rio Grande Valley to the Florida panhandle early on, but it was assumed that a Texas landfall was likely. By Tuesday it was felt the storm track would be inland at Corpus Christi Texas and awareness was reduced somewhat. On Wednesday new NWS data indicated a likely upper Texas Coast strike and UTMB leadership were re-engaged in preparations for this storm. It was determined that a full scale patient evacuation would be necessary and assessments were quickly conducted to position transportation assets to arrive in Galveston on Thursday September 10. By late Wednesday we were committed to an evacuation decision early Thursday morning, and this was in fact the case, given the overnight weather information

UTMB evacuated 469 patients from the inpatient towers, correctional hospital and behavioral health facility. Of these, some 80 were neonates including infant special care / intensive care Level 2 and Level 3 babies. Patients were transported to facilities in Austin, San Antonio and Dallas-Fort Worth metropolitan areas. The patient evacuation was completed in approximately 11 hours, with the last patient arriving in Austin just before midnight Thursday night.

UTMB released students on Wednesday and non-essential personnel on Thursday and essential personnel who were not required to ride-out the storm as evacuations were completed. UTMB Emergency Operations Center was fully activated on Thursday morning to support the patient evacuation and finalize planning for the hurricane. Contact was established with the State Operations Center / Department of State Health Services Liaison to keep them apprised of our status, with Mainland Center Hospital in Texas City, and with the regional Catastrophic Medical Operations Center operating at the City of Houston Emergency Operations Center.

Tropical storm – force winds were recorded beginning in the evening hours of Friday, and sustained winds of 70 + miles per hour by 10 pm. Storm surge and wind driven rain resulted in flooding of low lying areas of the campus by 5 pm and flooding was reported in the McCullough Building basement. Power outages and transfers to generators were reported sporadically beginning at 7 pm. Water was first noticed in the lobby of John Sealy Tower by 11 pm, and the first floor was cordoned off at the stairwells. At 9:45 John Sealy Annex transferred to generator power, and at 1155 the command center was relocated to the 5<sup>th</sup> floor of John Sealy Tower. At this time the Tower had lost primary power and was supported by emergency generators. By 0145, shortly before the eye was over land, water was reported to be over two feet deep in the Tower lobby. By 0930 Saturday morning the

winds had diminished, and water had begun to recede. At this time a roster check revealed all personnel were accounted for and safe.

By early afternoon Saturday it was safe to venture outside and damage assessments were begun. An all-staff meeting was called for 3 pm and reports were received from police, facilities, environmental health and command personnel. UTMB entered a "preserve and protect" mode and began the process of ordering reserve generators, pumps, chillers and electrical equipment to initiate the recovery phase.

Recovery is expected to continue for several months, and the full extent of damage will likely not be known before the end of the calendar year.

## Hurricane Ike Information

Hurricane Ike was a storm that had significant impact over a wide area of the Caribbean and the US. While categorized as a Category 2 Storm when it made landfall in Galveston, its size, timing, duration and the associated coastal surge had the impact of a much greater storm. Hurricane Ike formed September 1, 2008 and dissipated on September 16, 2008. Highest sustained winds were reported to be 145 mph prior to landfall at Galveston. The Eye of Ike passed over UTMB in the early morning hours of Saturday September 13, at which time we recognized the severe flooding across virtually all of the campus. Ike did significant damage as it passed over islands in the western Caribbean and Cuba and is responsible for 126 direct and 38 indirect fatalities and 202 missing persons. Early property damage estimates were placed at over \$31.5 Billion.

While wind speeds were diminished to Category 2 force at landfall in Galveston, the size of the storm stretched those winds over a 510 mile area, much larger than the size typically associated with a Category 2 storm. The result was significant storm surge and a much longer period of wind and surge impact as compared to other Category 2 storms that have hit the Texas Coast. Just before landfall and at landfall, Ike's winds ranged from 92-110mph based on NOAA/NWS Galveston's report.

The eye of the storm made landfall in Galveston at approximately 2:10 AM, about 2 hours before the morning high tide. The combination of surge and tide resulted in a storm surge typically associated with a Category 4 hurricane. Ongoing studies on storm surge predict that the maximum surge expected from a hurricane at Galveston is 19 feet at the shoreline. While official reports show a 7 foot surge at the east end of Galveston Island, the back wash wave resulting from release of the surge being pushed up into Galveston Bay as the eye of the storm passed over resulted in a wave of water from the north pushed by the shifting winds that rose in excess of 14 feet in certain areas of the UTMB campus. The variation in high water elevations experienced are thought to be due to the characteristics of the path traveled and the strong wind gusts. In some cases the movement of the water into a building wall was accelerated by strong wind pushed the water to elevations higher than the general surge.

## **Emergency Preparedness, Response and Recovery**

### **Preparation and Mitigation**

Preparation for the storm started as the storm approached the Gulf of Mexico. Standard preparations start at the beginning of each hurricane season and the emergency Standard Operating Procedures served the campus well. Hurricanes Dolly, Edouard and Gustav earlier in the year each served to help prepare for Ike and our situational awareness was at a very high level. There were lessons learned in each previous storm that served to prevent even greater impacts to the campus facilities and help prepare staff for this event. For Ike, the decision to evacuate patients and non essential personnel, students and staff came Thursday before the storm. The evacuation went smoothly. Other preparations included ensuring the supply stock was full, preparation of the command center, cleaning up and tying down loose equipment, and hardening certain areas for wind.

### **Response**

The initial storm impact to the campus was rising water due to the storm surge. Water started accumulating in low lying areas Friday morning and by afternoon had completely covered the plaza in front of the Ashbel Smith Building. As afternoon came, the winds picked up and started pushing water up against certain buildings. A fire broke out at the Galveston Yacht Club Friday afternoon. Due to the high water in the area, the fire department was unable to access the fire and extinguish it. The smoke from the fire was blown into the Emergency Department causing the ED to relocate to the Waverley Smith Pavilion. The move was a pre-planned action following the campus contingency plan and went smoothly. This location served as the primary entrance point for EMS-transported patients throughout Sunday and into Monday after the storm. Some lessons were learned in using the Waverley Smith Pavilion as the interim ED such as understanding access issues through corridors that were not designed for patient movement, but the operations were maintained without significant impact. As the winds increased and the water surge levels rose, normal power was lost just before 10:00 PM Friday night. The emergency generators came on to provide power to the areas designed to receive emergency power. Other areas remained dark. The loss of normal power was 3 hours before the eye of the storm reached the island, evidence of the size of the storm. The overall period of extreme wind and rain lasted over 8 hours. The UTMB Incident Command Center operated throughout the storm, despite loss of communications for a period of time and relocation to previously designated alternate location on the 5<sup>th</sup> floor of John Sealy Tower. The loss of communications was due to the flooding of the communication line splices (in the low lying junction boxes), the loss of the

cellular antennas and loss of the short wave radio boosters. The first communications to come back was cellular telephones aided by the arrival on Sunday of an AT&T mobile wireless cell system.

The storm surge was the critical factor in Hurricane Ike. Water entered the ground floor, crawl spaces and basements of most buildings. The most substantial water incursion was into the McCullough Building where the linear accelerators were flooded. The wind damage was minimal, with some windows lost and some roof damage. Mud and debris covered all areas that had been underwater. In a prior flood assessment (Lockwood Andrews Newnam) it was noted that the highest flood water level recorded was at elevation 14 feet. The impact from the storm resulted in high water ranging from around 8 feet to 14 feet across the campus. The back wash from Galveston Bay as the eye of the storm passed, pushed water up in certain areas breaching the entry points to the buildings.

The catastrophic damages to Galveston Island resulted in loss of all municipal and franchise utility services. Normal electrical power was lost during the storm and damages to equipment and campus systems hindered the restoration of power until the buildings were capable of receiving electricity. Normal power started to come back a week after the storm and was not completely restored until October 6<sup>th</sup>. All but three generators continued to operate in certain buildings while the equipment and the systems were being restored. Natural gas to the island was shut off for fear of fire and explosions after the storm. The municipal water system was lost for almost 2 weeks affecting fire protection, use of toilets and municipal drinking water. The municipal wastewater system was lost as well, providing no treatment for sewage until the city's treatment facilities could be restored. Loss of municipal water also meant that air conditioning systems that relied on potable water for cooling tower make up could not operate. Debris clogged storm drains. The restoration of the systems just to start to serve the campus took over 3 weeks.

Galveston Island was closed to all traffic except emergency first responder personnel for several days and residents were only allowed to return to inspect property and leave the island before the 6 pm curfew for over two weeks. As a result, essential UTMB personnel were instructed to remain evacuated, and Disaster Medical Assistance Teams were requested via the State Operations Center. DMAT personnel from more than 4 states arrived within 48 hours of landfall and provided medical care in the UTMB Emergency Department for over two weeks. At that time UTMB personnel were able to resume emergent treatment, but no patient admissions were possible due to lack of inpatient facilities. All patients were treated and released or stabilized and transported to more appropriate facilities. It is expected that local EMS will continue to divert patients to other facilities for life threatening, or complicated conditions for at least 90 days after Ike.

### Damages at UTMB due to Hurricane Ike

- Loss of function for all offices, support areas, clinics, and mechanical spaces on the first floor of approximately 80 buildings, including (but not limited to):
  - 3 Emergency Generators
  - Hospital Pharmacy Robotics System
  - ALL elevators
  - All Chilled Air Supply
  - All Domestic Water
  - All Local Power
  - Sterile Processing
  - Day Care Center
  - Outpatient Clinics
  - Materials Management / Central Supply
  - Hospital Admitting Office
  - Warehouse (surplus equipment and storage)
  - Blood Bank (Donor Center and Cross match Lab)
  - Food Services
    - Main Kitchen, Retail Food Service, Cafeteria
- Steam due to flooded pits and link seal breach.
  - Critical to Animal Cage washing
  - Sterilization
  - Hot water
- Condensate, domestic water, sump and other pumps due to flooded conditions
- Medical Gas Vacuum Pumps
- Student Housing
- Main Hospital Supply, Laundry/Linen distribution center
- Linear Accelerators
- Various Research and Clinical Laboratory Analyzers susceptible to high humidity
- Hospital Clinical Equipment Services
- Research Fabrication and Machine Shop
- ALL physical plant / maintenance tools, spare parts, etc.
- 37 Motor Vehicles, including 2 Bloodmobile and 1 Mobile Mammography Coaches
- UTMB Chapel
- UTMB Bookstore, Gift Shop and 2 Starbuck's kiosks.

## **Impact and Long Term Recovery**

Hurricane Ike's biggest impact was to UTMB's critical core buildings and operations. The buildings on the campus are categorized by the critical nature of each buildings function. Those buildings that must remain operational at all times are addressed differently than those buildings that can be evacuated without significant impact to the operations of the campus.

The impact on these buildings was assessed as follows:

- More than 1 Million square feet of building space flooded 6-inches to 6 feet
- Of the 36 critical Buildings in the Research and Healthcare Complex Core, 32 (89%) buildings were damaged due to flooding.
- Of the critical core Healthcare Buildings only, 10 out of 11 (91%) buildings sustained flood damage
- Of the Academic and Primary Support buildings 20 of a total 25 buildings sustained flood damage

## **Damage Estimate**

The damage to the UTMB campus was significant. The preliminary estimated cost to UTMB is \$710 Million, including but is not limited to the following:

- patient evacuation,
- student relocation,
- building damage,
- campus cleanup,
- infrastructure and equipment repair
- business interruption
- research equipment

### **Acknowledgement**

Portions of this report were abstracted from the UTMB Galveston Hurricane Mitigation Report (Draft) prepared by Charles Penland, PE of Walter P. Moore and Associates, Inc. November, 2008

Photographs from the Evacuation, Storm Damage and Recovery Operations are posted on the UTMB Home Page at "Images of Ike" (<http://intranet.utmb.edu/ike/gallery/1.asp>).

### **For More Information Contact:**

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**Appendix I  
Incident Evaluation and Improvement Planning Conducted October 3, 2008**

**University of Texas  
Medical Branch  
Hurricane Ike  
Incident Evaluation and  
Improvement Planning  
3-Oct-08**

<b>Observation</b>	<b>Recommendation</b>	<b>Corrective Action</b>	<b>Responsible Party</b>	<b>Due Date</b>
Incident Command System works well in our disaster management response	Increase practice of full scale activations of ICC for our Emergency Operations Center staff	Continue use of system; enhance performance	IEPOs	As Necessary
Task Tracking not well documented	Improve tracking of all assignments for all EOC staff to avoid duplication and assure all tasks are completed	Utilize Incident Command System Forms (ICS 200 series)	Incident Commander	As Necessary
Communications systems unreliable	Improve telephone & radio systems used in EOC to include speaker phones;	Replace telephone systems with better equipment; relocate 460MHz repeater to location with emergency power / evaluate uninterruptible power source	IEPO; IS / Telecommunications	By March 1, 2009
Some major tasks (Evacuation coordination, ED operations, Recovery efforts) should be conducted outside of EOC	Separate some functions by providing space adjacent to EOC during task completion	Identify adjacent locations outside of the command center for specialized work	IEPOs	To Be Determined
Emergency Lights needed in case of total power failure		Increase number of battery powered lights available to the command center and other ride-out team staff	IEPOs	By March 1, 2009
Incomplete information on personnel on site during event	Require sign - in / sign - out rosters w/ contact numbers	Institute rostering at outset; develop electronic "dump" of staff contact info from UTMB Directory	Incident Commander + IS staff	As Necessary
Need to acquire a "Super Phone"		Acquisition	Telecommunications	By March 1, 2009

Housing for personnel needs infrastructure - housing by function (eg all police, FOAM staff) in one area		Include in Institutional Plan	IEPOs / Incident Command Structure	Annual Plan Revisions (January 15, 2008)
Changes in EOC staff assignments need to be coordinated with command staff		More rigorous adherence to basic ICS principles	Incident Commander	As Necessary
Evacuation process will further improve if we routinely practice/drill this activity		Schedule regular drills	IEPOs	Establish Quarterly Drill Schedule (w/Plan Revisions in January)
Off - Site leadership and staff should include reps for other/additional areas - will allow work to be shared between on and off campus resources		Identify additional members of off-campus teams	IEPOs / Incident Command Structure	By March 1, 2009
Too large a number of staff remaining on site and potential for wrong skill mix of staff on site		Identify assets and talents needed for each phase of the disaster response at the outset.	IEPOs / Incident Command Structure	As Necessary
Business Continuity Planning needs to be better integrated into disaster response		Improve BCP integration	Business Continuity Coordinator	By March 1, 2009
Each area / department should have back-up hard copy documents for all policies, or other electronic text		Include in Institutional Plan as a department requirement	Department Leadership	By March 1, 2009
Essential employees are not all as physically fit as the demands of the position require - eg climbing stairs when elevators fail		Essential Person status designation must include assessment of whether the E personnel can physically perform the duties required.	Department Leadership	By March 1, 2009
There were incidents of unauthorized dependents on site during the storm		Regularly reiterate and enforce our "no dependents" policy	Institutional Leadership	As Necessary
Complete rosters of all personnel on site were not constructed from the outset of the event		Incorporate this function into the procedures to establish the command center and/or as we enter Emergency Status	See 6	As Necessary

Requests received at Logistics, Security and other 'desks' were not consistently tracked		Utilize Incident Command System Forms (ICS 200 series)	IEPOs / Incident Command Structure	As Necessary
Alternative Department locations for business - critical departments are not all satisfactory		Reassess the alternate locations in light of our experience in Ike	IEPOs / Department Management / Entity Leaders	By March 1, 2009
Direct communications between Animal Resource Center staff and FOAM is necessary		Consider radio or push-to-talk telephone technology	ARC / FOAM Leadership	By January 16, 2009
Structure and staffing of ARC teams needs to be reviewed / revised		Reevaluate ARC plans; create ARC BCP	ARC Leadership	By January 16, 2009
Can we install an alternative elevator system for use in power failure ?		Evaluate fail safe power systems for critical devices	FOAM	TBD
Research ride-out team needs to be expanded		Reevaluate Research plans; create Research BCP	Research Officer	By January 16, 2009
Research recovery timeframe needs to be reevaluated (>3-5 day current plan)		Reevaluate Research plans; create Research BCP	Research Officer + Business Continuity Manager	By January 16, 2009
Research Business Continuity Plan needs reevaluation / revision		Reevaluate Research plans; create Research BCP	Research Officer + Business Continuity Manager	By January 16, 2009
Public Information Office should have staff assigned at multiple locations (accompany any off-island teams)		Identify additional members of off-campus teams	PIO	As Necessary
PIO needs a portable / battery-operated printer		Acquisition	PIO	ASAP
PIO should evaluate "re-packaging" information for targeted audiences (eg research community and legislative groups)		Reevaluate Public Information Plans	PIO	As Necessary
Improve information transfer at shift changes		Incorporate this function into the procedures to establish the command center and/or as we enter Emergency Status	Incident Command Structure	As Necessary

Increase personnel depth for all EOC positions		Incorporate this function into the procedures to establish the command center and/or as we enter Emergency Status	IEPOs / Incident Command Structure	As Necessary
UTMB DMAT-type team may be of value		Evaluate creating an internal response team	IEPOs and Healthcare Leadership	TBD
Finance business process recovery need better redundancy		Reevaluate Financial Management Plans	CFOs	By March 1, 2009
Paper payroll is problematic		Reevaluate Financial Management Plans	CFOs	By January 16, 2009
Employee services (eg EAP) should be established earlier in response activities		Reevaluate Human Resources / Employee Services Plans	HR Officer / EAP + Business Continuity Manager	By January 16, 2009
A Labor Pool and Runners should be assigned to the EOC		Incorporate this function into the procedures to establish the command center and/or as we enter Emergency Status	IEPOs	As Necessary
Student affairs & services - housing, placement, etc. - should be assigned early in event		Incorporate this function into the procedures to establish the command center and/or as we enter Emergency Status	Incident Commander	As Necessary
Rare book collection preservation plan needs to be reviewed / revised			Moody Medical Library Leadership	By March 1, 2009
Mitigation activities need to be evaluated and fast-tracked for implementation			CFOs, FOAM, IEPOs, Organizational Leadership	On-Going
Establish a formal office of emergency management with appropriate leadership and staffing		Re-visit prior work; develop additional recommendations	President, Organizational Leadership	By January 16, 2009
		Observations and Recommendations from departmental debriefings		
Preplan number of staff needed in specific areas for level of event				
Plan specific process for making / confirming housing arrangements				

Specify and communicate building lockdown schedule				
Determine ARC support activities pre-storm and during storms				
Develop Plan A, B, and C for each critical activity				
Separate evacuation plans for med-surg adults and for infants				
Define staff in outlying buildings, eg Keiller				
Need an EOC org chart board with magnetic nameplates				
Large flat screen TV for EOC				
Improve phone system / speaker capability				
Acquire a "turtle" speaker phone for conference calls				
Contingency plans for animal consolidation based on type of emergency				
Identify & describe discrete levels of emergency preparation status				
Specify schedule for returning animals to ARC from labs				
Clarify family & dependent housing w/TDCJ personnel - too may unexpected guests				
Stockpile more battery operated table-top lanterns in case of generator failure				
Add mental health professionals to essential personnel list				
One EAP counselor should be Essential and on the ride-out team				
All incident command staff and exec's should be debriefed by EAP as soon as practical after the event				
Employee Health staff should be prepared to report as quickly as				

practical after the event to begin supportive services.				
A cache of supplies and medications expected to be needed by Employee Health should be staged prior to the event for immediate access afterwards				
Pre-hire drug screening should be relocated to a non-affected area for continuity purposes with applicants				
Not enough FOAM handheld radios for all staff on site needing communications				
Many personal vehicles were used for business purposes, but no fuel was readily available.				
Too few police officers to unlock buildings for BMS and FOAM access				
Too many different staff were directing BMS Cat activities - resulted in duplications and conflicts				
Reassignments need to include proper backup - one pair of staff members divided duties, but had no second to relieve them.				
Persistent web page that lists all information systems and their status.				
All reference material accessed on a web page should have a static copy in a word or excel format stored at off site data center.				
All command centers should be set up at the same time before non-essential staff leave.				
Move building wiring for data and voice lines and splice points to 2nd floor where possible.				
Shut down remote phone systems and disconnecting them from power (Rebecca Sealy, 700				

University, Frost Bank, Lipton, Shearn Moody Plaza) as soon as the buildings are scheduled for lock down.				
Critical IT equipment should not be stored in first floor storage areas.				
Higher priority for circuit request or have pre-positioned location for use after a storm where connectivity is already active.				
Need better power backup to Levin Hall and Trauma Center				
Manual Toilet Flushing problematic; Training needed; Pre - position water supplies in high rise buildings pre - event;				
Restrict restroom use to 3rd floor or below in high rise buildings				
Sub-command centers (eg FOAM) located away from sleeping areas				
Housing for personnel needs infrastructure - housing by function (eg all police, FOAM staff) in one area; Assign blocks of rooms and manage assignment of rooms within group to which assigned				
Identify safest buildings for housing (eg away from exterior walls, windows)				
Too many essential staff on site during storms; Assess need for specific groups - eg once patient evacuation complete, release unnecessary medical & nursing staff				
Increase number of remote site staff				
Identify dedicated team for electrical tie-in, chiller connections, etc.				
Island Access a problem				

Damage assessment checklists used sporadically; Develop checklists for each discipline - FOAM, EHS, PD et al - conducting inspections				
Recovery process too limited; Develop plans for extended recovery timeframes				
Improved management of freezers for specimens and reagents - location, identification of critical and non-critical freezers				
Research needs robust BCM Plan				
Research activities in clinical buildings presents a problem for recovery operations; No research labs should be located in clinical or business-occupancy buildings				
Current self-sufficiency plans are too limited; Expand plans and preparations from current 72-96 hrs to 7 days or beyond				
Documentation of activities in command center should be improved; Written documentation of all calls, requests, problems & resolution should be recorded on ICS standard forms				
Vans, Shuttles limited; Plan for expanded fleet operations to support employees needed for recovery				
Gasoline for personal vehicles used for business was not available				
Food service was generally good but improved options should be considered				
Ice production capability should be considered; Identify ice-making capability post-storm				



Plan should clearly identify our response to a large storm; Evacuate all personnel if prediction is for a Category 4 or 5 storm - as defined by either wind speed or storm surge				
Should improve employee support activities - beyond EAP - to include housing, other basic needs				
Kudos to vendors/partners who responded: BMS Cat, McBride Electric, Vaughn, RLH, others				
Formal Recognition for ride-out and recovery team needed				
Need better plans for ARC/Research areas				
Need better management of external assistance - reports of thefts which could have been avoided if UTMB staff were present in all buildings being remediated				
Opening all buildings (eg research) at one time caused problems and strains the infrastructure systems; Building restoration should be one at a time or small groups concurrently				
Communications systems unreliable				
External communication to employees was sporadic				
Building systems management would be better if we powered down non-critical bldgs before a storm				
Mission critical operations should each identify alternate locations and prepare for loss of utilities in advance; Pre-position essential facilities (eg water truck, fuel truck, port-a-cans, hand washing stations and shower facilities) prior to a storm				

City water tower might have provided source of non-potable water if connected to UTMB distribution system				
Water Well might have provided water supply				
Compensation plan should be defined and distributed in advance of event. Seems to change every time				
Standardize pay and comp time policies for emergency response times				
UT System responders from other campuses (PD and EHS) were essential and performed beyond expectations				
Photographic documentation of damage, high water marks, etc. should be a routine part of damage assessment.				

**Appendix 2**  
**Hurricane Ike Planning Matrix (Final Revision Prior to Landfall)**

The following document is utilized as a planning tool during the "120 Hour Clock" established prior to expected landfall of tropical storms and hurricanes. It establishes essential functions to be completed, coordinates the UTMB decision making timeline with other state agencies and the Governor's Division of Emergency Management and provides the command center staff and UTMB executive leadership and decision makers with a quick reference to critical tasks and responsibilities in the days and hours leading up to and immediately after an event. The document should be printed 11 x 17" (Ledger) format for clarity.

# HURRICANE IKE

Revision # 4 @ 09/11/08

## PLANNING GRID

Entity / Area / Department / Essential Information	H - 120	H - 96	H - 72	H - 48	H - 36	H - 24	H - 0 40 mph Sustained Wind	LANDFALL	H + 24
	Sunday 09/07/08	Monday 09/08/08	Tuesday 09/09/08	Wednesday 09/10/08		Thursday 09/11/08	Friday 09/12/08	Saturday 09/13/08	Sunday 09/14/08
	1100 AM	1100 AM	1100 AM	1100 AM	2300	1100 AM	1100 AM	AFTER NOON	
CAMPUS	Normal Business Operations	Normal Business Operations	ACTIVATE EMERGENCY PLANS; EOC OPERATIONAL W/LIMITED STAFFING 0800 - 1700	RELEASE NON ESSENTIAL PERSONNEL AT CLOSE OF BUSINESS DAY/REQUIRED DUTIES AND STUDENTS AT END OF ACADEMIC DAY ALL DEPARTMENTAL PLANS ACTIVATED		PREPARE FOR HURRICANE IMPACT	CLOSED *RIDE-OUT TEAM ESSENTIAL PERSONNEL ON SITE BY 7 AM		DAMAGE ASSESSMENT

HOSPITALS	Normal Business Operations	Normal Business Operations	Normal Business Operations	RELEASE NON ESSENTIAL PERSONNEL AT CLOSE OF BUSINESS DAY/REQUIRED DUTIES; DEFINE TIME FOR EVACUATION DECISION	GO / NO-GO @ 0700	CONDUCT PATIENT EVACUATION	SERVICES LIMITED TO "TREAT & TRANSFER"	SERVICES LIMITED TO "TREAT & TRANSFER"	DAMAGE ASSESSMENT
			DISCHARGE APPROPRIATE PATIENTS	DISCHARGE APPROPRIATE PATIENTS, SUSPEND ELECTIVE ADMISSIONS, DAY SURGERY AND EMERGENCY TRANSFERS TO TRAUMA CENTERED			DAY SURGERY - CLOSED ELECTIVE ADMITS - SUSPEND EMERGENCY TRANSFERS - LIMIT		
CLINICS	Normal Business Operations	Normal Business Operations	Normal Business Operations	PREPARE WORKSPACE FOR FOUL WEATHER PRIOR TO DEPARTURE		CLOSED	CLOSED	CLOSED	DAMAGE ASSESSMENT
			NOTIFY CLINIC PATIENTS OF CLINIC CLOSURES	NOTIFY CLINIC PATIENTS OF CLINIC CLOSURES					
SCHOOLS	Normal Business Operations	Normal Business Operations	Normal Business Operations	RELEASE STUDENTS AT END OF CLASS DAY		CLOSED	CLOSED	CLOSED	DAMAGE ASSESSMENT

RESEARCH AREAS	Normal Business Operations	Normal Business Operations	PREPARE FOR LABORATORY CLOSURES	PREPARE WORKSPACE FOR FOUL WEATHER PRIOR TO DEPARTURE	CLOSED	CLOSED	CLOSED	DAMAGE ASSESSMENT
ARC	Normal Business Operations	Normal Business Operations	CONSOLIDATE ANIMALS TO ARC FACILITIES	PREPARE WORKSPACE FOR FOUL WEATHER PRIOR TO DEPARTURE	CLOSED	CLOSED	CLOSED	DAMAGE ASSESSMENT
BSL LABORATORIES	Normal Business Operations	Normal Business Operations	PREPARE FOR LABORATORY CLOSURES	PREPARE WORKSPACE FOR FOUL WEATHER PRIOR TO DEPARTURE	CLOSED	CLOSED	CLOSED	DAMAGE ASSESSMENT
FACILITIES & CAMPUS SERVICES / MAINTENANCE	Normal Business Operations	Normal Business Operations	TEST GENERATORS & TOP OFF FUEL INCINGENATOR OPERATIONAL 0800	RUN INCINGENATOR AS NEEDED; PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY; RIDE OUT TEAM IN PLACE 0700	PRESERVE / PROTECT	DAMAGE ASSESSMENT
UTILITIES	Normal Business Operations	Normal Business Operations	Normal Business Operations	PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY; RIDE OUT TEAM IN PLACE 0700	PRESERVE / PROTECT	DAMAGE ASSESSMENT

POLICE	Normal Business Operations	Normal Business Operations	Normal Business Operations	AFTERHOURS BUILDING LOCKDOWNS / SHUTDOWNS AS REQUIRED	AFTERHOURS BUILDING LOCKDOWNS / SHUTDOWNS AS REQUIRED	PREPARE FOR WEATHER EMERGENCY; RIDE OUT TEAM IN PLACE 0700	PRESERVE / PROTECT; BUILDING LOCKDOWNS COMPLETE; LIMIT ACCESS	DAMAGE ASSESSMENT
LOGISTICS	Normal Business Operations	Normal Business Operations	DRY ICE ORDERED	DRY ICE DELIVERED TO SPECIFIED DOCKS	STORM KIT ORDERS FILLED; ADDITIONAL WATER, FOOD, LINEN DELIVERED	PREPARE FOR WEATHER EMERGENCY; RIDE OUT TEAM IN PLACE 0700	PRESERVE / PROTECT	DAMAGE ASSESSMENT
EHS	Normal Business Operations	Normal Business Operations	Normal Business Operations	PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY	PREPARE FOR WEATHER EMERGENCY; RIDE OUT TEAM IN PLACE 0700	PRESERVE / PROTECT	DAMAGE ASSESSMENT
UTMB EMERGENCY OPERATIONS CENTER / MEETINGS	MONITOR NWS; SOC CONFERENCE CALLS; ADVISORIES TO CAMPUS LEADERS	1030 amConference Call + Decision Making Meeting / 430 pm Conf Call	1030 amConference Call + Decision Making Meeting / 430PM, 930 PM Conf Call	1030 amConference Call + Decision Making Meeting / 430PM, 930 PM Conf Call	1030 amConference Call + Decision Making Meeting / 430PM, 930 PM Conf Call	PREPARE FOR WEATHER EMERGENCY; ALL COMMAND CENTER STAFF IN PLACE 0700	AD HOC	AD HOC
			UTMB Emergency Operations Center Activated 1900 (Limited Staff)	UTMB Emergency Operations Center Activated		UTMB Emergency Operations Center Activated	UTMB Emergency Operations Center Activated	UTMB Emergency Operations Center Activated

<p>UTMB VOLUNTEER ORGANIZATIONS</p>		<p>UTMB H.E.A.T. STAFF AT EMBARCATION POINTS - 0800 (HEAT VOLUNTEERS EXCUSED FROM CLASSES)</p>				
<p>LOCAL JURISDICTIONS</p>	<p>CITY DECISION ON EVACUATION; STATE- PROVIDED BUSES TO GALVESTON COUNTY; POSSIBLE CITY OF GALVESTON SPECIAL NEED POPULATION EVACUATION</p>	<p>VOLUNTARY EVACUATION - WEST ISLAND, POSSIBLE GALVESTON COUNTY MADATORY EVACUATION</p>	<p>MANDATORY EVACUATION ORDER, CITY OF GALVESTON, CITY OF JAMAICA BEACH; VOLUNTARY EVACUATION OF OTHER GALVESTON COUNTY JURISDICTIONS</p>	<p>PREPARE FOR WEATHER EMERGENCY</p>		
<p>STATE &amp; LOCAL EMERGENCY OPERATIONS CENTER</p>	<p>SOC AT LEVEL 1 HURRICANE STATUS (24/7 ) 0730</p>					
<p>CONF CALLS: ( 866) 205 3988 PIN 883967#</p>	<p>10:30 am. 4:30 PM</p>	<p>10:30 am. 4:30 PM &amp; 9:30 PM</p>	<p>10:30 am. 4:30 PM &amp; 9:30 PM</p>	<p>10:30 am. 4:30 PM &amp; 9:30 PM</p>	<p>10:30 am. 4:30 PM &amp; 9:30 PM</p>	
<p>GALVESTON COUNTY EOC ( 281) 309 - 5002</p>	<p>LOCAL WEATHER CONFERENCE CALL 10 AM</p>					
<p>CITY OF GALVESTON EOC 765 - 3710</p>						



