

# EMERGENCY PREPAREDNESS PLAN

## ENVIRONMENT OF CARE

## Tab A

### Introduction

The Emergency Preparedness Plan is designed in order to establish procedures by which the institution can respond in an informed and organized manner to any situation or event that may occur, which has the potential to disrupt normal activities. These events can be either internal or external, and include natural disasters, severe weather, industrial accidents, utility systems failures, or weapon of mass destruction incidents. The plan is based on a hazard vulnerability analysis, which is evaluated and up-dated annually. This plan is designed to be a general guideline for responsibilities and duties to be implemented by the institution in the event of a catastrophe. All University Hospital and Medical Center departments are expected to develop and maintain an emergency plan, including a current call list. A Departmental Emergency Preparedness Guideline template is available online that coordinates with the institutional plan. Four phases of emergency management - mitigation, preparedness, response, and recovery - are addressed by the plan.

Further information and training resources are available on the UMMC disaster website – <http://disasterplan.umc.edu>

**Mitigation:**

Mitigation is the actions taken to lessen the severity and impact emergency situations would have on routine operations. The institution's Emergency Preparedness Plan is designed to compliment and coordinate with those of the Mississippi Emergency Management Agency (MEMA), State Department of Health, State Department of Mental Health, State Department of Radiological Health, Hinds County Emergency Management Agency, Metropolitan Medical Response System (MMRS), the Jackson-Vicksburg Hospital Council, the Mississippi Hospital Association Emergency Radio Network, Institutes of Higher Learning (IHL) and the regional National Disaster Medical System (NDMS). The life safety portion of the plan provides coordination with the Jackson Fire Department by conducting facility tours with personnel on all shifts from responding stations, and preplanning with District Chiefs for equipment placement during an actual response. Radiation emergency procedures were developed in conjunction with the State Department of Radiological Health and the Grand Gulf Nuclear Power Station. Safety and Emergency department personnel have been trained for response to nuclear, biological, and chemical incidents. The Mississippi Regional Poison Control Center is located on this campus, and there are toxicologists on the emergency department staff. Medical Center personnel have been actively involved in both metropolitan and state planning for weapon of mass destruction (WMD) response planning.

**Preparedness:**

Preparedness includes all activities undertaken to ensure facilities have the necessary resources available to effectively respond to an incident. The Medical Center's focus is on events that were given a high probability of occurrence in the Hazard Vulnerability Analysis. Contingency procedures to be followed in the event of utility failures are developed and maintained by Physical Facilities. The institution maintains a three-day stock of medical consumable supplies, and agreements are in place with vendors for emergency procurement of necessary supplies. Food Service maintains a five day supply, with a contingency plan for emergency resupply from the vendors. Decontamination supplies and personal protective equipment are maintained in a storage room adjacent to the Emergency Room, in the event of a biological, chemical or radiological incident. As a part of the MMRS plan, personnel from the Jackson Fire Department Haz/Mat Team will respond to the facility to assist with patient decontamination. An agreement for unscheduled interruption of services is in effect between all health care facilities in the Jackson-Vicksburg Hospital Council area. Personnel from the Medical Center have conducted and participated in numerous training sessions to prepare for chemical, biological, or radiological terrorism events.

**Response:**

Response activities are the actions undertaken during actual emergencies or simulated events (drills). These are the actual written response plans that have been prepared for implementation in the event of a wide variety of possible catastrophes. This institution has chosen to use a phased response system, in order to provide the most efficient usage of resources and manpower. There are four phases that can be activated during an emergency response situation. The

level of response is dictated by the magnitude and expected duration of the emergency situation. All activities will be coordinated and directed from the Incident Command Center, which will be established by the Vice Chancellor and/or his designee. The decision to shift activities to a higher phase is made in the Incident Command Center. Once the decision to activate the incident command center is made, all activities will follow the Hospital Emergency Incident Command System (HICS) and NIMS (National Incident Management System) from integration of ICS 100, 200, and IS 700, 800 level courses as well as 300 and 400 for upper Administration. Job action sheets will be given to all personnel as the command center is activated.

*Disaster Alert:*

First notification is received of an event that may produce victims in sufficient numbers to exceed normal staffing and facility capabilities. Any employee who becomes aware of the imminent situation immediately contacts the Hospital Administrator-on-Call (AOC). The AOC contacts the Vice Chancellor, Associate Vice Chancellor, Emergency Medical Director, Emergency Preparedness Coordinator, Public Affairs, and the Medical Director, to establish the Incident Command Center, and begin the mobilization, notification, and preparation activities.

*Phase I:*

Operation at this level begins with the arrival of the initial victims, and remains in effect until the number of victims exceeds the capabilities of the Emergency Department to adequately treat. As soon as this situation is recognized, the senior medical person in the Emergency Department will notify the Incident Commander.

*Phase II:*

The decision to move to this phase is made in the Incident Command Center, by the Vice-Chancellor, Associate Vice Chancellor, Chief of Staff, Medical Director, Administrator on Call, and the Emergency Preparedness Coordinator. During activities in this phase, all available personnel will be called to the Manpower pool. The Incident Command Center will be expanded as required by the extent and duration of the emergency. The Incident Commander will make decisions on how to effectively utilize personnel in the manpower pool.

*All Clear:*

The decision to announce all-clear is made by the command staff in the Incident Command Center, after consultation with the Medical Director and appropriate Local, County, and State emergency management headquarters. At this point, the facility begins recovery procedures designed to return the institution to normal operations.

Plans that have been developed for the following external and internal emergency situations are included as tabbed annexes:

1. Bioterrorism
2. Bomb Threat
3. Civil Disturbance
4. Communications Failure
5. Electrical Power Failure

6. Facility Evacuation
7. Fire
8. Hazardous Materials Incident (chemical or radioactive)
9. Hostage Situation
10. Inclement Weather/ Tornadoes
11. Infant/Child Abduction
12. Mass Casualty Incident
13. Piped Gasses Systems Failure
14. Steam System Failure
15. Vacuum System Failure
16. Water System Failure

**Recovery:**

Recovery activities are the actions that are taken to return the facility to normal operations. Most of these activities are departmental in nature. (See Appendix A) The Department of Psychiatry and Coordinated Care (Social Work Section) will provide support as needed for information regarding post disaster response, the expected psychological soliloquy, and various management methods available for persistent disaster related problems.

**UMMC PURPOSE & SCOPE**

Purpose:

The University of Mississippi Medical Center Emergency Preparedness Plan outlines the University's procedures for managing major emergencies that may threaten the health and safety of the campus community, disrupt its programs and activities, or require assistance for the surrounding communities. The Plan identifies departments, agencies and individuals responsible for emergency planning, emergency response, business continuity and business recovery planning. The Plan establishes procedures to prepare for emergencies, as well as the management structure for coordinating and managing response to emergency situations.

Scope:

The University of Mississippi Medical Center Emergency Plan guides preparedness, response and recovery operations and business continuity and recovery actions. It applies to a broad range of emergencies and may be activated during natural or man-made emergency incidents, to include but not limited to: fire, flood, hazardous material spills, severe storms, terrorist attack or other situations requiring evacuation of facilities.

**OVERVIEW**

All departments located at the University of Mississippi Medical Center should prepare and coordinate emergency preparedness, business continuity and business recovery plans in accordance with the Emergency Preparedness Plan.

## **Responsibilities**

The University of Mississippi Medical Center Emergency Preparedness Plan is the responsibility of the Disaster Preparedness Committee under guidance and recommendations from the Institutional Disaster Preparedness Committee.

Deans, Department Heads, and Directors should develop emergency, contingency, business continuity and business recovery plans for their organizations and/or departments. The Emergency Preparedness Coordinator is available to assist in preparation of these supporting plans, and can retain a copy of any organizational level plans. A template is available on the disaster website to assist in the creation of departmental plans and guidelines (<http://disasterplan.umc.edu/plan.html>) .

## **Definition of Terms**

The Emergency Preparedness Plan for emergency management provides guidance in the form of emergency plans for continuous or long-term threats to the University. The Emergency Preparedness Plan explains the general responsibilities and procedures for managing emergency incidents on campus. The Emergency Preparedness Plan will be reviewed by the Disaster Preparedness Committee annually, and updated as required.

- Appendices in University level plans provide additional information or supporting information. Appendices often include graphics or maps, asset listings or other details.
- Supporting plans are prepared by all departments/organizations named in a University plan with a specific responsibility.
- Business continuity plans address how an organization will continue to provide critical services through an incident, to include a short-term problem or event. Situations to be covered by business continuity plans could include temporary office closure due to water pipe breaks or utility failures as well as more serious dislocations or relocations due to fire or natural disaster.
- Business recovery plans address the issues related to restoring complete operations following major disruption due to serious incidents such as natural disasters or structure fires. Business recovery plans include discussions on cost recovery and mitigation.

Both business continuity and recovery planning utilize the concept of business impact analysis to identify critical and time sensitive functions. A business impact analysis will also help identify vital resources and prioritize recovery assets. This analysis can be useful in determining any special needs such as business interruption insurance.

## University of Mississippi Medical Center

June 2008

### BACKGROUND/RATIONALE:

Potential events were evaluated in each of the three categories of **probability**, **risk**, and **preparedness**. The potential events evaluated were determined based on documents available through the American Society of Healthcare Engineers' website, Joint Commission publications, and local experience.

Issues affecting **probability** included:

- Known risk
- Geographic location
- Historical data
- Presence of local high-risk industry
- Manufacturer/vendor statistics
- Discussions with local emergency management office

Issues affecting **risk** included:

- Threat to life and/or health
- Disruption of services
- Equipment or facility damage/failure possibilities
- Loss of community trust
- Financial impact
- Legal issues

Issues affecting **preparedness** included:

- Status of current emergency plans
- Status of staff training
  - Performance during tests of plans
  - Performance during actual emergencies
  - Availability of back-up systems with redundancies
  - Availability of community resources

The ratings for each event in the area of probability, risk and preparedness were multiplied. The total values, in descending order, represent the events most in need of organization focus and resources for emergency planning. Management determined that there was no significant risk for events with values below 3, and that no further actions were necessary at this time.

## **Natural Events:**

Weather-related events constitute the greatest hazards resulting from natural events. An average of 26 tornadoes is reported in Mississippi annually. Compared to other states by the frequency per square mile, Mississippi ranks number 3 for the frequency of tornadoes, number 2 for fatalities, number 2 for injuries per area, and number 7 for costs per area (source: National Weather Service data, 2008). Spring weather brings thunderstorms, tornadoes, and rains known to generate occasional local flooding in the community. Weather systems can be accompanied by generously sized hail, the size capable of inflicting significant injury and damage to property.

Severe heat is occasionally encountered during the summer, with highs averaging between 90-92° F and lows averaging from 68-70° F. The record high temperature is 106° F.

During the winter months, the average high temperature ranges from 56-59° F, with lows averaging 34-37° F. The lowest recorded temperature since 1970 is 2° degrees F. Snow (average of 0.9 inches per year) and sleet/freezing rains are generally limited to sporadic events. However, these at time can paralyze the local community, occasionally making it difficult for medical center employees to report for duty or return home.

Weather's greatest potential impact is related to utility issues, discussed in the following section.

## **Technological Events:**

Failure of electrical power is considered to be a significant hazard. Although the community electric service has a reliable record, the probability of power outages remains significant due to the challenges brought by wind and ice storms. To mitigate these risks, the medical center has installed new switchgear and a more reliable second (redundant) commercial electrical feed. While we are equipped with effective backup emergency generators, unforeseen problems could still result in a power failure that potentially could affect patient care.

This medical center faces the same life-threatening risk of fire found in any large medical facility. While the probability of fire is low (due to numerous fire prevention and suppression upgrades) and preparedness is good (fire drills, new employee orientation, refresher training, etc.), the consequences of a major fire remain high. Failure of the fire suppression (sprinkler) system is considered a low probability. However, the potentially serious consequences are mitigated by the close proximity (within one mile) of three Jackson Fire Department stations.

In the past, the medical center has been affected by failure of the municipal water supply, primarily due to water main breaks during cold weather. The City of Jackson has repaired many of its older water supply lines, including the intake valves for the water purification plant at the Ross Barnett Reservoir. Medical center preparedness, response, and recovery plans for water and other utility emergencies are described in Tab K of this plan.

Other technological events with the potential for high disruption include steam failure, HVAC failure, telephone/telecommunications failure, information systems failure, structural damage, and an external natural gas leak. Each of these potential disruptions has been determined to be of low probability, with good preparedness, both externally and internally. Specific preparedness, response, and recovery plans are described in various annexes and appendices as listed in the Table of Contents.

### **Human Events:**

Two security issues--workplace violence and a hostage situation—are considered to be the medical center's areas of highest vulnerability, primarily because of previous events in the local community and at the medical center. To mitigate and prepare for these possibilities, the number of entrances to the medical center is being minimized. Metal detectors and armed police officers screen all personnel entering the emergency department. Specialized programs have been presented to medical center police officers.

Terrorism is not a new phenomenon in the United States but has existed in most locales at a low and almost unnoticeable level. The terrorist threat in this country during the 60s, 70s, and 80s consisted primarily of leftist-oriented extremist groups. The current domestic terrorist threat involves right wing and special interest extremists. Militia and Patriot groups advocating extreme antigovernment doctrines now exist throughout the United States. Extremist factions of special interest groups (anti-abortion, anti-gay, animal rights, and environmental advocates, for example) pose a potential terrorist threat, as do cults (especially doomsday and destructive cults) and extremist religious organizations.

Even before the events of September 11, 2001, it was known that the United States is a priority target for foreign terrorists. National intelligence also estimated that the use of chemical, biological, or radiological weapons was not a question of *if* they would be used, but *when*. A *hoax weapon of mass destruction device* can have an impact equal to a real one - causing community disruption, public panic, fear, etc. This medical center continues to participate actively with local emergency management agencies, the Mississippi State Department of Health, and community healthcare facilities through the Metropolitan Medical Response System (MMRS) to prepare for a coordinated response to a terrorist/WMD event occurring in the local area. The medical center has also prepared plans for recognizing and responding to a terrorist/WMD event (chemical, biological, radiological, or nuclear) occurring within the medical center. Any explosion, whether purposeful or accidental, would be treated initially as a criminal act until proven otherwise.

A small external hazardous materials (hazmat) incident with few victims would only be moderately disruptive to the medical center, if at all. A large-scale hazmat event, on the other hand, would be highly disruptive to medical center operations. First, the number of casualties alone could tax the medical center's capabilities, similar to a large number of casualties arriving from a traumatic event such as a passenger train derailment. Second, many of the victims would be self-referred, presenting to the medical center before being decontaminated at the scene. (The Jackson Fire Department would handle on-scene decontamination, in accordance with community

plans.) Third, the number of worried well demanding medical attention would put additional strains on the medical center's response capabilities. This third factor would be compounded by fears that the incident was the result of terrorist activity. For these reasons, plans have been developed in concert with the local community for a coordinated response. The medical center's plan reflects our role in the community's overall response plans.

The University of Mississippi Medical Center has a commitment to providing necessary educational support to assure outstanding graduate medical education programs. In the event these programs could not be sufficiently supported during a time of disaster, the office of graduate medical education has policies and procedures in place to ensure timely placement in an alternate center so that training can be continued with the least amount of interruption.

### Hazard Vulnerability Analysis for the University of Mississippi Medical Center - 2008

EVENT	PROBABILITY				RISK					PREPAREDNESS			TOTAL	
	HIGH	MED	LOW	NONE	LIFE	HEALTH	HIGH	MODERATE	LOW	POOR	FAIR	GOOD		
					THREAT	SAFETY	DISRUPTION	DISRUPTION	DISRUPTION					
SCORE	3	2	1	0	5	4	3	2	1	3	2	1		
<b>HUMAN EVENTS</b>														
MASS CASUALTY (TRAUMA)		2			5								1	10
MASS CASUALTY RECEPTION		2					3						1	6
MASS CASUALTY INCIDENT (HAZMAT)		2			5								1	10
HAZMAT INCIDENT - EXTERNAL		2			5								1	10
<b>SECURITY</b>														
VISITING/INJURED VIP		2					3						1	6
INFANT ABDUCTION		2					3					2		12
HOSTAGE SITUATION		2					3					2		12
CIVIL DISTURBANCE		2			5								1	10
LABOR ACTION				0	5						3			0
BOMB THREAT		2			5								1	10
WORKPLACE VIOLENCE		2			5								1	10
<b>TERRORISM</b>														
<b>EXTERNAL-LOCAL COMMUNITY</b>														
CHEMICAL		2			5								1	10
BIOLOGICAL		2			5								1	10
RADIOLOGICAL		2			5								1	10
EXPLOSIVE - SEE MCI (TRAUMA)		2			5								1	10
<b>INTERNAL - UMMC</b>														
CHEMICAL			1		5								1	5
BIOLOGICAL		2			5								1	10
RADIOLOGICAL		2			5								1	10
EXPLOSIVE - SEE MCI (TRAUMA)			1		5								1	5

FORMULA: PROBABILITY X RISK X PREPAREDNESS = TOTAL

EVENT	PROBABILITY				RISK					PREPAREDNESS			TOTAL
	HIGH	MED	LOW	NONE	LIFE	HEALTH	HIGH	MODERATE	LOW	POOR	FAIR	GOOD	
					THREAT	SAFETY	DISRUPTION	DISRUPTION	DISRUPTION				
SCORE	3	2	1	0	5	4	3	2	1	3	2	1	
<b>NATURAL EVENTS</b>													
HURRICANE			1				3				2		6
TORNADO	3				5						2		30
SEV. THUNDERSTORM/WINDS	3						3				2		18
HAIL		2							1			1	2
SNOW FALL			1						1			1	1
BLIZZARD				0					1			1	0
ICE STORM		2					3				2		12
EARTHQUAKE			1				3			3			9
TIDAL WAVE				0	5					3			0
SEVERE COLD		2				4					2		16
SEVER HEAT/HUMIDITY		2				4					2		16
DROUGHT			1						1			1	1
FLOOD, EXTERNAL				0			3			3			0
WILD FIRE/SMOKE				0		4				3			0
LANDSLIDE				0			3			3			0
SINKHOLES				0			3			3			0
VOLCANO				0	5					3			0
EPIDEMIC		2			5						2		20

FORMULA: PROBABILITY X RISK X PREPAREDNESS = TOTAL

EVENT	PROBABILITY				RISK						PREPAREDNESS			TOTAL
	HIGH	MED	LOW	NONE	LIFE	HEALTH	HIGH	MODERATE	LOW	POOR	FAIR	GOOD		
					THREAT	SAFETY	DISRUPTION	DISRUPTION	DISRUPTION					
SCORE	3	2	1	0	5	4	3	2	1	3	2	1		
<b>TECHNOLOGICAL EVENTS</b>														
ELECTRICAL FAILURE			1		5								1	5
GENERATOR FAILURE			1		5								1	5
TRANSPORTATION FAILURE			1				3						1	3
FUEL SHORTAGE			1				3			3				9
NATURAL GAS FAILURE			1						1				1	1
WATER FAILURE			1			4							1	4
SEWER FAILURE			1			4							1	4
STEAM FAILURE			1		5								1	5
FIRE ALARM FAILURE			1		5								1	5
FIRE SUPPRESSION FAILURE			1		5								1	5
MEDICAL GAS FAILURE			1		5								1	5
MEDICAL VACUUM FAILURE			1					2					1	2
HVAC FAILURE			1					2					1	2
<b>COMMUNICATION SYSTEM</b>														
TELEPHONE/TELECOMMUN.		2					3					2		12
OVERHEAD PAGING SYSTEM		2						2				2		8
PERSONAL PAGING SYSTEM		2					3						1	6
INFORMATION SYSTEMS FAIL		2					3					2		12
<b>SECURITY SYSTEM</b>														
CCTV SURVEILLANCE SYSTEM			1						1			2		2
ENTRANCE DOOR SYSTEM				0					1			2		0
EGRESS ALARM SYSTEM			1						1			2		2
FIRE - INTERNAL			1		5								1	5
FLOOD - INTERNAL			1				3						1	3
HAZMAT EXPOSURE/SPILL, LEAK			1		5								1	5
UNAVAILABILITY OF SUPPLIES				0	5								1	0
STRUCTURAL DAMAGE			1		5							2		10
NATURAL GAS LEAK - EXTERNAL			1			4							1	4

FORMULA: PROBABILITY X RISK X PREPAREDNESS = TOTAL

