Disaster Preparedness and Response in Texas Hospitals

Part 1

Hospital Emergency Preparedness Planning

Bioterrorism Preparedness and Response

TDH
TEXAS DEPARTMENT OF HEALTH

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TEXAS INSTITUTE
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This is the First Edition, dated March 24, 2003, prepared by the Texas Department of Health and the Texas Institute for Health Policy Research. Updates will be provided as they become available.

Preface

On September 9, 2002 the Texas Institute for Health Policy Research (Institute) was contracted by the Texas Department of Health (TDH) to accomplish the Disaster Response Project. The goal of this project was to assemble a group of experts in a collaborative effort to develop a guidance document to aid all Texas acute care facilities in their preparation for response to an act of bioterrorism and to identify hurdles to preparedness program implementation. The project was completed in January 2003. The Disaster Response Project was funded through the Bioterrorism Hospital Preparedness Cooperative Agreement that originated with the Health Resource Services Administration (HRSA) of the federal government and administered by TDH. HRSA and TDH recognized a need for hospital disaster response planning in Texas in preparation for potential acts of bioterrorism. HRSA's Bioterrorism Hospital Preparedness Program focused on assuring that the Nation's health facilities have sufficient equipment and training to respond to bioterrorism and mass casualty incidents. The Institute acted as the grant recipient responsible for project management, policy research, facilitation and production of this guidance document along with a report of hurdles to be addressed prior to program implementation. To accomplish these goals in the short time outlined, three groups were established:

1. The Hospital Response Committee (HRC) – Responsible for developing the guidance document.
2. Policy Advisory Committee (PAC) – Responsible for identifying and prioritizing hurdles to implementation.
3. Reading Committee (RC) – Responsible for reviewing and commenting on guidance document and hurdle drafts.

The three Disaster Response Project committees consisted of a diverse group of health care and emergency response leaders, strategists, practitioners and analysts of hospital needs in terms of bioterrorism preparedness. Over the course of four months, this group constructed documents that emphasize continuous quality improvement to enhance relationships, understanding, services, and improvement of equipment and personnel in the pursuit of preparedness. The committee's approach was based on the belief that all services are valuable, that they must be integrated, and that shared leadership and coordination will effectively prepare each region for disaster.

The committee believes that this product will allow hospitals a more informed, qualified, and integrated approach to preparedness and public health. The guidance document will be an essential tool to Texas hospitals as they proceed with preparedness planning. This effort – and in particular TDH's recognition of the importance of these goals – will allow hospitals to save lives in biological terrorist events.

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The guidance document and identified hurdles have been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this review was to provide candid and critical comments that assisted the Institute in making this published document as sound as possible and to ensure that the document meets standards for objectivity, evidence, and responsiveness to the project charge.

We wish to thank the following individuals for their participation in the creation, review and comment of this document:

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Although the contributors listed above have provided constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the document before its release. Responsibility for the final content of this document rests entirely with the Texas Department of Health.

Introduction:
Bioterrorism Response Overview

The Hospital's Role in Bioterrorism Response Planning

The response to a bioterrorist event needs to be an integrated response by local public health, emergency management, community resources and hospitals. The role of hospitals in preparation for a response is to integrate different emergency planning efforts to assure a coordinated response. The hospitals responsibility is to identify and prepare for their role in an emergency response to a biological event.

It is expected that there will be coordination of response and resources between the hospitals, local public health, local government and emergency management. The resulting emergency response document should detail the plan for an integrated community response to an event. Through cooperation and coordination between hospitals in a given region, a regional response plan will be developed that addresses access to local, state, and federal resources.

In order to have a comprehensive, coordinated response plan, it is essential that all hospitals participate in local, as well as regional planning efforts. This will assure communication among all the facilities and a comprehensive response throughout a region.

What is Bioterrorism?

Bioterrorism is the deliberate release of pathogenic microorganisms (bacteria, viruses, fungi or toxins) into a community. The most likely diseases associated with bioterrorism include smallpox, anthrax, botulism, plague, and tularemia. Additionally viral hemorrhagic fever (VHF) viruses such as Lassa, Marburg, and Ebola rarely, if ever, identified in North America, may be deliberately introduced. Other potential agents include brucellosis, western and eastern equine viruses that cause encephalitis, Q fever, glanders, and toxin-producing *Staphylococcus aureus.* With the exception of smallpox, VHF, and the encephalitis viruses, all bioterrorism agents can be treated with antibiotics or toxin antagonists if promptly diagnosed. Persons who received one or more smallpox vaccinations before the disease was declared eradicated worldwide have little or no immunity and virtually every living person in the world is now susceptible to the disease. The above-mentioned diseases are not meant to be all-inclusive since there are many food- or water-borne agents that could potentially be used in a bioterrorist event.

Recognizing a Bioterrorist Event

The key to rapid intervention and prevention is to maintain a high level of vigilance. To minimize the number of casualties, early identification that an outbreak is from an unnatural source is essential. A bioterrorist event may be suspected when increasing numbers of otherwise healthy persons with similar symptoms seek treatment in hospital emergency departments, physician's offices, or clinics over a period of several hours, days, or weeks. The early clinical symptoms of infection for most bioterrorism agents may be similar to common diseases seen by health care professionals every day. The

principles of epidemiology should be used to assess whether the patient's symptoms are typical of an endemic disease (influenza) currently circulating in the community or an unusual event. The most common features of an outbreak caused by bioterrorist agents include:

- A rapid increase (hours to days) in the number of previously healthy persons with similar symptoms seeking medical treatment;
- A cluster of previously healthy persons with similar symptoms who live, work, or recreate in a common geographical area;
- An unusual clinical presentation;
- An increase in reports of dead animals;
- Lower incident rates in those persons who are protected (e.g., confined to home; no exposure to large crowds);
- An increase number of patients who expire within 72 hours after admission to the hospital;
- Any person with a history of recent (within the past 2-4 weeks) travel to a foreign country who presents with symptoms of high fever, rigors, delirium, rash (not characteristic of measles or chick pox), extreme myalgias, prostration, shock, diffuse hemorrhagic lesions or petechiae; and/or extreme dehydration due to vomiting or diarrhea with or without blood loss.

Hospital Preparedness and Response

It is essential that hospitals are prepared to respond to a large-scale contagious disease outbreak. The impact on the health care system, whether it is a man made or naturally occurring outbreak, will be tremendous. When preparing for a response to bioterrorism, hospitals should prepare similarly to how emergency management prepares for any kind of disaster.

Emergency management focuses on four areas when planning for any type of disaster: Mitigation, Preparedness, Response, and Recovery.

1) Mitigation - activities taken prior to an event that will lessen the probability or effects of the incident. Hospitals need to consider what they can do to lessen the impact on their facility in the event of a large-scale out break.
2) Preparedness - efforts taken to enhance the response capabilities in order to effectively handle a large number of patients presenting for treatment. Preparedness includes the creation of plans that will protect staff, patients, and the facility while serving the community.
3) Response - the activities that occur during an event to improve the outcome through a well developed plan that will activate needed resources within the emergency response system.
4) Recovery - includes the short and long-term measures to bring the system back to normal operation.

This guidance document will provide information on how to interface with local emergency management planners, how to identify and activate community and regional

resources, and how to establish a process for accessing local, state, and federal resources through the emergency management system. Texas has a well-developed and practiced State Emergency Management Plan. For hospital response plans to be properly coordinated within their region, it is essential that they be knowledgeable of and follow the fundamentals of the State Emergency Management Plan. The regional planning process includes local emergency management planners who can help direct the individual hospital and regional response plan development so it has appropriate interface with the local plans.

The desired outcome of this regional hospital planning process is to have a plan that includes input from all entities that are doing emergency response planning so that an integrated regional response can be developed that complements the state plan and will be in place across Texas.

Federal Response to Bioterrorism

At the Federal level, there are many government agencies charged with developing a coordinated bioterrorism response plan. The Department of Health and Human Services (HHS) is the primary agency responsible for the nation's health and medical response. Within HHS the Office of Emergency Preparedness (OEP) coordinates activities and works with other federal agencies including the Federal Emergency Management Agency (FEMA) and the Departments of Justice (DoJ) and Defense (DOD). Other agencies within HHS that play a key role in bioterrorism preparedness include the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA) and the National Institutes of Health (NIH).

The Federal Bureau of Investigation (FBI) is the lead federal agency for coordinating the federal response to a terrorist incident or threat. The FBI has the role of crisis management, investigation, and intelligence support for terrorist prevention and response to actual events. A response to an announced bioterrorist threat would be coordinated by the FBI and local law enforcement agencies. If the FBI believes the threat to be credible and has obtained specifics about the event, the information would be communicated to local health departments and TDH.

FEMA is the lead federal agency in charge of consequence management. Consequence management includes measures to protect public health, rescue, medical treatment of casualties, evacuation of people at risk, protection of first responders, and preventing the transmission of infection. It also focuses on restoring essential government services and providing relief to governments, businesses, and individuals affected by the consequences of terrorism.

The Centers for Disease Control and Prevention (CDC) has established the Strategic Pharmaceutical Stockpile (NPS) program as a national repository of antibiotics, chemical antidotes, life support medications, IV administration and airway maintenance supplies, and medical/surgical items. The Texas Department of Health and the Governor's Division of Emergency Management (DEM) are the lead state agencies for planning and access to the NPS. The NPS is designed to re-supply state and local public health and medical response entities in the event of a biological and/or chemical terrorism incident

anywhere, at anytime within the United States. The NPS will back up first response efforts with a general re-supply package followed by larger quantities of the medical materiel specific to the health consequences associated with the agent used.

The response to an announced bioterrorism threat would be coordinated by the FBI and local law enforcement agencies. If the FBI believes the threat to be credible and has obtained information about the time, place, mode and/or contents of the release, the information would be communicated to local health departments or TDH. Public health personnel will be responsible for:

- Defining the population at risk for exposure;
- Locating the persons at risk for exposure as soon as possible to assess for illness and provide appropriate preventive therapy;
- Monitoring the persons who have received preventive treatment for symptoms or signs of the disease;
- Implementing enhanced surveillance for the suspected disease at health care facilities, laboratories and emergency medical services.

Role of the Texas Department of Health (TDH)

The Texas Department of Health (TDH) is the lead state agency for the public health response to a bioterrorist incident or threat. The primary objective of TDH is to determine the etiology and source of the outbreak and identify the most effective and efficient interventions to protect public safety. The roles and responsibilities of TDH in bioterrorism surveillance include:

- Supporting local health departments' efforts to increase awareness of clinicians and laboratorians about bioterrorism threat agents and diseases;
- Strengthening existing disease surveillance systems;
- Utilizing and/or developing surveillance systems that might be useful in detecting illnesses resulting from bioterrorist threat agents;
- Providing technical assistance to local health jurisdictions; and
- Coordinating expanded surveillance in the affected jurisdictions in the event of a suspected bioterrorist event or other biologic disaster.

In accordance with the State Emergency Management Plan, during a suspected or confirmed biological terrorism event, the State Emergency Operations Center (EOC) is activated. The TDH has responsibility for the Health and Medical Emergency Support Function (ESF). Annex H of the State Emergency Management Plan describes the responsibilities of this function in detail. These responsibilities include the following:

- Coordinate public health and medical personnel upon request of an affected region;
- Coordinate medical supplies, pharmaceuticals, and equipment upon request of an affected region;
- Ensure coordination and information flow with local health departments, emergency management organizations, and providers of medical care, facilities, and supplies.

TDH is the primary resource in handling a biological outbreak and through coordination with the DEM, Department of Public Safety and other ESF's, participates in the following activities:

- Confirmation, by consensus agreement, that the disease scenario is moderately or strongly suggestive of a bioterrorism event;
- Notification of local, state, and federal bioterrorism response partners and, when deemed necessary, activation of the TDH Biological Emergency Response Team and the Regional Epidemiologic Response Team;
- Coordination with local, state, and federal public health leaders;
- Communication with other bioterrorism response partners.

Working with local health departments and Public Health Regions, TDH provides support for the following activities:

- Epidemiologic investigation to include developing a case definition, case finding, case interviews, data collection and analysis;
- Contact tracing;
- Surveillance for non-human diseases;
- Developing recommendations for treatment and post-exposure prophylaxis;
- Support and technical assistance for local immunization, prophylactic distribution, or quarantine efforts;
- Provide assistance for laboratory surveillance of biological agents;

Role of Local Health Departments

The local health department has the lead role in the early detection and identification of a bioterrorist event. In a multi-jurisdictional bioterrorist event, local, state, and federal public health officials would participate in the epidemiologic investigation under a joint command structure.

Several counties in Texas have developed bioterrorist response plans and could implement these plans when required. It is highly recommended that hospital infection control practitioners, epidemiologists, and safety officers participate in local bioterrorism response planning.

Under current regulations, some potential bioterrorist diseases require immediate reporting (e.g., anthrax, botulism, plague [human or animal], viral hemorrhagic fevers, and outbreaks of any disease). How rapidly local and state health departments can respond to the crisis will depend on how rapidly they are notified of a possible outbreak.

Role of the Infection Control Practitioner

The hospital infection control practitioner (ICP) is going to play a significant role in the rapid identification of an outbreak of community-acquired infection and the notification of local health departments. The ICP is responsible for managing the day-to-day activities of the hospital-wide infection surveillance, prevention, and control program. The ICP is in a unique position to detect rapid or subtle increases in patients admitted

with unusual clinical presentations, increases in emergency room visits, and Critical Care Units (CCU) admissions.

Frequent surveillance in CCU, the emergency room, and other patient care units is vital to the early recognition of a bioterrorism event. The medical record of all new patients admitted with unusual infectious disease symptoms that go undiagnosed for more then 48 hours should be reviewed. The ICP should, at a minimum, review all admission diagnoses, microbiology reports, emergency room admission and discharge diagnoses several times each week. The emergency department and CCU should communicate any unusual infectious disease patterns to the ICP as soon as possible. It is essential that the ICP develop a clinical syndrome monitoring system for those departments that are likely to be the first affected by a bioterrorism event, such as the emergency department. A clinical syndrome monitoring system could include a method of alerting the ICP when a threshold of the following events is exceeded:

- Emergency room diversions due to increased visits to the emergency department or CCU bed unavailability;
- Increase in the number of patients with influenza-like illness, rash with fever, gastroenteritis (vomiting and/or diarrhea), and acute asthma attack;
- Unexplained deaths occurring in otherwise healthy persons, especially if there is clinical evidence suggestive of an infectious disease process; and
- Increase in the number of persons with sepsis or septic shock.

The ICP should be specifically educated in the epidemiology, diagnosis, and treatment of all potential bioterrorism related diseases. Additionally, the ICP should receive training in the hospital's emergency management plan and the local health department's response plan and should be prepared to assume a leadership role in the hospital's response to the outbreak. A trained professional should be available in the event the ICP is unavailable.

The Hospital Emergency Incident Command System

The Incident Command System (ICS) was developed in the early 1970's by the fire service in order to allow fire agencies to respond to emergencies in an efficient, coordinated manner. Since its development, ICS has evolved into an "all-risk" system that can be utilized for all types of fire and non-fire emergencies. The Hospital Emergency Incident Command System (HEICS) is based on ICS, and over the years, HEICS has been adapted for use by many health care facilities. A feature of this system is the task-oriented Job Action Sheets (job descriptions) that inform those who participate in an emergency the function of their job, when they should do it, and whom they will report to after the job is complete.

Training and Education

Physicians, nurses, technicians, and administrative personnel should be trained in all aspects of the hospital bioterrorism response plan during new employee orientation and at least annually. Drills and exercises should be conducted periodically to assess the level of staff preparation and the effectiveness of the plan. Hospitals should actively participate in city, county and/or state bioterrorist exercises as these events are scheduled.

The hospital bioterrorism response plan should be evaluated and revised annually, based on the results of internal and external drills and as information becomes available. Infection control practitioners should be well informed of and participate in state and local bioterrorism preparedness planning and exercises.

Decontamination of Patients and Environment
In most cases, patient decontamination will not be necessary. The incubation period of biological agents makes it unlikely that victims of a bioterrorist event will present immediately following the exposure event. The one exception may be an announced release of a bioterrorist agent, with gross surface contamination of victims with a confirmed agent or material such as raw sewage. In the rare cases where decontamination may be warranted, simple washing with soap and water is sufficient. If necessary, environmental surfaces can be decontaminated with a U.S. Environmental Protection Agency (EPA) registered sporicidal disinfectant or with a 0.5% hypochlorite solution *(1* part household bleach added to *9* parts water). Bleach solution should NOT be used to decontaminate patients or pets.

Evidence Collection
In some cases, the FBI may require collection of exposed clothing and other potential evidence. The hospital ICP should develop procedures for evidence collection in consultation with the FBI field office.

The primary goal in any bioterrorist event is protecting public safety, and all else is secondary. By the time the first patients seek treatment and a bioterrorist event is suspected, there may be no evidence to collect. However, hospitals do need to prepare for the possibility that they may be responsible for evidence collection and there should be policies and procedures in place to collect patient's clothing and other personal effects. In the event that the bioterrorist event is announced, it will become even more important that an orderly procedure be in place for the collection of evidence.

In collaboration with local law enforcement and regional FBI representatives, hospitals should establish lines of authority about who will be responsible for evidence collection. Procedures should include how weapons brought in by patients (e.g., guns, knives, and syringes) will be retrieved, secured and handed over to law enforcement officials.

At a minimum, hospitals should have a supply of plastic bags, marking pens, and ties to secure the bags. Each individual bag should be labeled with the patient's name, medical record number, and date of collection. Forms should be developed to inventory valuables and provide documentation of the person responsible for the valuables. If valuables are to be transported to the FBI or local law enforcement agency, the facility should document who received them, where they were taken, and how the valuables will be returned to the owner.

Preparing for a Large Influx of Patients
No hospital is ever fully prepared for an immediate large influx of patients requiring

critical life support systems. This is the primary reason why hospitals should be involved in the local and county emergency planning process. Decisions will have to be made as to whether one hospital in the city or county will be designated as a bioterrorist hospital or if all hospitals will share equally in the influx of patients. When the number of patients exceeds the number of available beds and staffing, decisions will have to be made as to whether alternative, off-site facilities will be opened, who will staff these facilities, and how to they will be supplied. At the hospital level, major decisions will have to made and implemented quickly. Some of these decisions will include:

- Implementing the hospital emergency management plan and bioterrorism response plan;
- Canceling non-emergency surgeries and other elective procedures;
- Developing discharge instructions for non-contagious patients;
- Discharging patients to other acute care facilities out of the affected geographical area, or to long-term care or home care and assuring that the level of care required by these patients can be met;
- Increasing stock supplies of personal protective equipment including respirator with carbon filter;
- Increasing stock supplies of antibiotics (oral and parenteral);
- Determining the availability and sources of additional medical equipment such as ventilators and IV pumps and other equipment normally rented.
- Deciding when it is safe to discharge patients with communicable diseases and developing specific discharge instructions including recommendations for care-giver protection, handwashing; disinfection of the environment, and post-mortem care;
- Deciding the maximum capacity of the morgue.

Managing the Psychological Aspects of Bioterrorism

Following a bioterrorism event, anxiety and alarm can be expected from infected patients, their families, healthcare workers, and the worried well. Psychological responses may include anger, fear, panic, unrealistic concerns about infection, fear of contagion, paranoia, and social isolation. Infection control practitioners should include mental health workers (psychiatrists, psychologists, social workers, and clergy) when developing facility-specific bioterrorism response plans. The following are some points to consider:

- Communicate clear, concise information about the infection, how it is transmitted, what treatment and preventive options are currently available, when prophylactic antibiotics, antitoxin serum or vaccines will be available, and how prophylaxis will be distributed;
- Provide counseling and possible anxiety-reducing medications to the worried well and the victims' family members;
- Provide educational materials in the form of frequently asked questions;
- Provide home care instructions;
- Provide information on quarantine and isolation;
- Information released to the public should be coordinated with local and stated health officials.

The Media
The media should be informed about bioterrorism and the potential disease agents. Following the identification of a bioterrorist event the local or state health department should assume responsibility for contacting the media. Hospitals should prepare a statement (See Communication Plan) that details the number of victims, the symptoms, and where to obtain further information.

Laboratory Support
With the possible exception of *Yersinia pestis* (plague) and some food- or water-borne disease agents, most hospital clinical laboratories are not equipped to identify bioterrorist pathogens. These laboratories will primarily be responsible for collection, packaging, and transportation of specimens to the county or state laboratories. Each clinical laboratory should develop specific policies and procedures for collection, packaging, and transporting specimens to the next level of expertise. Infection control practitioners should consult with local law enforcement and the FBI to determine what information should be included in chain-of-custody documents. Laboratories collecting blood specimens for serology testing should retain an aliquot for a short time to accommodate lost specimens. The retained blood specimens should be kept in a secure, locked cabinet. During a bioterrorist event, laboratory personnel should take maximum precautions when handling specimens. Laboratory personnel should wear appropriate personal protective equipment when handling all clinical specimens, and all specimens should be opened, plated, or aliquotted in a biosafety hood.
There is a national proposal that laboratories be grouped according to their ability to support the diagnostic needs associated with a bioterrorist event.

- Level A: This level consists of hospital laboratories, clinical laboratories, and most small health department labs. The role of the level-A laboratory is to conduct initial procedures to rule out critical biological agents, and refer samples to higher level laboratories.

- Level B: Consists of county or small state laboratories with special diagnostic testing capability. The role of the level-B laboratory is to provide the first level of agent confirmation and transportation to the next level.

- Level C: Large state health department laboratories and other labs with advanced testing capabilities such as molecular technology. Level-C laboratories provide agent confirmation and reference-laboratory capabilities.

- Level D: CDC or select Department of Defense laboratories such as the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). These laboratories provide the highest level of agent characterization, and conduct research and development on laboratory methods for enhanced bioterrorism agent identification.

The Pharmacy
The pharmacy should maintain a reasonable, daily inventory of antibiotics currently

recommended in the treatment of patients with suspected or diagnosed bacterial bioterrorist agents. These antibiotics include, but are not limited to, gentamicin, ciprofloxacin and doxycycline. The CDC has made significant progress in building emergency stockpiles of antibiotics as well as other emergency medical supplies (intravenous therapy supplies and other emergency medications), that can be available within 12 hours after the federal government confirms that a bioterrorist event is in progress. Hospitals should develop criteria for stopping the non-essential use of prophylactic and therapeutic antibiotics until the stockpile arrives at the local destination and preparations are made to distribute the stockpile resources.

Discharge Planning
In all probability, patients in the hospital at the time that a bioterrorist event is evolving will have to be evaluated for quick discharge. If patients require continued acute care, hospitals may have to make arrangements for transfers to other hospitals, or if stable, to skilled nursing facilities in different geographical areas.

Patients with bioterrorist-related infections should not be discharged until they are deemed non-infectious (plague, smallpox, and viral hemorrhagic fever). For each bioterrorist disease included in the Planning Guide, there are home care instructions. These were developed primarily for caring for patients who could not be admitted to the hospital because maximum bed capacity and staffing levels had been reached or exceeded. These instructions can be modified to provide information for patients recuperating from an infectious disease. The question of regulated waste in the home has also been discussed. Most bioterrorist agents are rendered non-infectious by exposure to air and sun. Therefore, no specific recommendations for packaging and removing medical waste from the home are necessary. However, the ICP should consult with local waste management companies and the local or state government medical waste program for recommendations related to removing regulated medical wastes from the home.

Post-mortem Care
Hospitals should assess the maximum number of cadavers that can be stored in the facility morgue at any one time. In the event that many people expire within a short period, the local or state government will assume responsibility for providing adequate refrigeration and disposal of deceased victims through the coroner's mutual aid system. Deceased persons should not be released to funeral homes until the local health department authorizes the disposition. Autopsies should not be performed by hospital pathologists unless the local health department explicitly authorizes the procedure.

Concept of Emergency Management Planning
Planning for a response to a disaster is a process that is grounded in a standardized approach to plan development, organization, and implementation. There are major components that are addressed in an emergency response plan that delineate authority, operations, command and control, and support that are necessary to respond to a major disaster.

This document has attempted to follow the concepts of emergency management planning so that the process hospitals follow in their regional planning will integrate with local plans within their region. The end-product will be an emergency operations plan that addresses the hospital role in response to a major disaster, to include the effects of weapons of mass destruction.

Guide to the Development of
Regional Hospital Emergency Response Plans

I. PURPOSE

A. The threat that weapons of mass destruction will be deployed against the United States has never been higher. In the aftermath of the events of 2001, preparedness and response planning efforts reached a feverish pitch and were aided by federal financial assistance. The Bioterrorism Hospital Preparedness Program is one such program and is aimed at improving the preparedness and response capabilities of hospitals to respond to a biological event, other contagious disease outbreak, or other public health threat or emergency. Each Trauma Service Area in Texas should have an emergency response plan that addresses how its resources will be brought into play in response to a major disaster involving a large number of patients.

The initial thrust of this planning is directed toward the effects of weapons of mass destruction with bioterrorism being a priority since it would have the greatest impact on public health. As other weapons of mass destruction are added to the planning process, the plans will build on the planning done for bioterrorism. The basic plan for response to a disaster involving a large number of patients should take into consideration any disaster, whether natural or man-made, and a basic response by hospitals. Annexes will be used to address weapons of mass destruction with appendices to address response plans for specific weapons. The first appendix will be related to bioterrorism. Annexes will be added to address other disaster response issue. One such Annex could be the inclusion of the regional trauma plan as part of this plan.

B. This Guide is intended primarily for use by hospitals responsible for developing and maintaining regional emergency response plans. It provides guidance for the development of a regional plan that will integrate into local and state emergency management planning documents and procedures. The information contained here is intended to provide the tools to take the information collected during the regional planning process and organize it into an emergency management type of document. This will allow the regional hospital plan to mirror other emergency management plans across the state and better integrate the hospital plan into existing emergency management plans. It can also be used to develop an individual hospital emergency response plan that will integrate into local emergency planning efforts.

II. AUTHORITY

This document is prepared pursuant to:
A. The authority for emergency planning for hospitals is found in Annex H – Health and Medical of the local emergency management plan.
B. The authority for the development of local emergency management plans come from:

1. § 418.043 of the Government Code (the Texas Disaster Act), which provides that the Division of Emergency Management shall adopt standards and requirements for local and interjurisdictional emergency management plans. This guide is based on those standards.

2. § 418.044 of the Government Code, which provides that the Division of Emergency Management shall take an integral part in the development and revision of local and interjurisdictional plans.

V. REFERENCES

1. Texas Government Code, Chapter 418 (Emergency Management). This section of the Government Code may also be cited as the Texas Disaster Act.
2. Executive Order of the Governor Relating to Emergency Management.
3. Texas Administrative Code, Title 37, Part I, Chapter 7 (Emergency Management).

VI. DISTRIBUTION

Initial distribution of this guide is made to each Hospital Preparedness Planning Group and licensed hospitals in Texas. Additional copies are available from the Texas Department of Health, Office of the State Epidemiologist and may be obtained by calling (512) 458-7219. This document is also available on the TDH web site at http://www.tdh.state.tx.us.

CHAPTER 1
OVERVIEW OF LOCAL, STATE, AND FEDERAL EMERGENCY MANAGEMENT RESPONSIBILITIES

I. GENERAL

Those entities involved in regional hospital planning must have an understanding of emergency management in Texas in order to prepare response plans that interface with existing emergency management plans. There are many layers of emergency planning in Texas that have a basis in local, state and federal laws. The basic emergency management responsibilities of local governments and state agencies and officials are outlined in Chapter 418 of the Texas Government Code (the Texas Disaster Act), the Executive Order of the Governor Relating to Emergency Management, and Title 37, Part I, Chapter 7 (Emergency Management) of the Texas Administrative Code. Relevant portions of those authorities are summarized below.

II. LOCAL GOVERNMENT RESPONSIBILITIES

A. City & County Responsibilities

1. Every jurisdiction is expected to have its own emergency management program or participate in an interjurisdictional program. Programs may be organized at the local (county or city) level or on an interjurisdictional basis.

a) Counties are required to maintain their own emergency management program or participate in a local or interjurisdictional program that serves the entire county or interjurisdictional area, except those cities that have established their own local programs.
b) Cities may establish and maintain their own local emergency management program. Cities that do not maintain their own program are expected to participate in the county emergency management program, which is typically organized on an interjurisdictional basis. Cities that do not maintain their own emergency management programs shall designate a liaison officer to work with their county in emergency management activities.
c) Other Interjurisdictional Programs. Interjurisdictional programs involving one or more cities and/or one or more counties may be established to deal with specific circumstances or conditions.

2. Each local or interjurisdictional emergency management agency is required to prepare and keep current an emergency management plan that provides for disaster mitigation, preparedness, response, and recovery. The plan must contain clear and complete statements of the emergency responsibilities of local agencies and officials. The plan must meet the state planning standards promulgated by DEM.

3. Each local or interjurisdictional emergency management agency shall distribute its emergency management plan to all appropriate officials, including those agencies or individuals who are assigned responsibilities in the plan.

B. Responsibilities of Mayors and County Judges.

1. The mayor of each municipality and the county judge of each county are designated as the emergency management directors for their respective jurisdictions. Mayors or county judges may designate an emergency management coordinator to serve as their assistant in administering the emergency management program. A coordinator for an interjurisdictional organization should be appointed by mutual agreement of the judge(s) and the mayor(s) concerned.

2. Mayors and judges must notify DEM of the manner in which the political subdivision is providing an emergency management program, identify the person who heads the program, and furnish additional information required by the Division.

3. Mayors and judges are also responsible for:

a) Providing guidance and direction for the emergency management program.
b) Taking actions to equip and train local emergency responders and officials and provide appropriate emergency facilities.
c) Declaring a local state of disaster when appropriate. After such declaration, they may issue orders or proclamations invoking specific emergency powers of those granted the Governor in the Texas Disaster Act on an appropriate local scale to respond to and recover from the disaster.
d) Directing the local response to emergency situations using local resources, resources from other jurisdictions covered by mutual aid agreements, and any other on-call emergency resources that the local government may have contracted for.
e) Requesting external assistance if local resources are inadequate or inappropriate to deal with the emergency situation. Channels for requesting assistance during an emergency are depicted in Figure 1-1 at the end of this chapter. The county should be the first source of external assistance for a city. Requests for state assistance should be made by the mayor or county judge to the local Disaster District.
f) During emergencies, keeping the public and the local Disaster District informed of the situation.
g) Overseeing recovery programs and related hazard mitigation programs after a disaster.

C. Responsibilities of the Emergency Management Coordinator. The responsibilities of emergency management coordinators are generally determined by the mayor or judge who appointed them, and typically include the following:

1. Serving as the staff advisor to the mayor or county judge on emergency matters and keeping the local governing body apprised of the city or county's preparedness status.

2. Implementing the emergency management guidance and policies established by the mayor or judge.

3. Coordinating local emergency planning, training, and exercise activities and overseeing maintenance of the local emergency management plan.

4. Coordinating the operational response to local emergencies and disasters.

5. Overseeing readiness of the local emergency operations center (EOC) and warning system; managing the EOC when in operation.

6. Maintaining liaison with local emergency service providers, school districts, organized emergency volunteer groups such as the Salvation Army and the American Red Cross, industry, and other organizations or agencies that may be involved in disaster mitigation, preparedness, response, and recovery.

III. STATE GOVERNMENT AUTHORITY AND RESPONSIBILITIES

A. The Governor. The Governor is charged with meeting dangers to the state and people presented by disasters and providing guidance and direction for state emergency management efforts. The Governor may declare a state of disaster and exercise emergency powers set out in the Texas Disaster Act. If state resources are inadequate to resolve an emergency situation, the Governor may request assistance from other states pursuant to interstate compacts. The Governor may also request specific assistance from the federal government or request that the President issue federal emergency or disaster declarations that activate a variety of federal assistance programs.

B. The Emergency Management Council. Pursuant to provisions of the Texas Disaster Act, the Governor has established an Emergency Management Council, consisting of representatives of 29 State agencies and two volunteer groups, to advise and assist in all matters relating to disaster mitigation, preparedness, response, and recovery. During major emergencies and disasters, all or a portion of the Emergency Management Council convenes at the State EOC to coordinate the use of state resources to respond to the emergency situation and respond to local requests for emergency assistance that cannot be resolved at the Disaster District level.

C. The Governor’s Division of Emergency Management.

1. The Division operates the State EOC, monitors incidents throughout the state on a daily basis, coordinates and supports the response activities of the Emergency Management Council during major emergencies and disasters, provides situation reports to senior state officials and the Emergency Management Council. The Division administers post-disaster recovery and mitigation programs in accordance with the Stafford Act. The Division also assists the Governor with other matters relating to emergency management.

2. The Division maintains the state emergency management plan, promulgates state standards and requirements for local and interjurisdictional emergency management plans, reviews such plans, and maintains a database on the status of local emergency planning.

3. The Division administers a program providing financial assistance for local emergency management programs and several grant programs that provide assistance to local governments and agencies for emergency facilities and equipment, hazardous materials planning and training, and property protection mitigation for coastal jurisdictions.

4. The Division has field representatives, called Regional Liaison Officers (RLOs), stationed throughout the state to assist local governments with preparedness activities and to advise local and state officials during emergencies. For preparedness activities, the RLO is the primary point of contact for local governments.

D. Disaster Districts.

1. Disaster Districts are the State's regional emergency management organizations. Each Disaster District has a Disaster District Committee (DDC), chaired by the local Highway Patrol commander, which consists of local representatives of agencies represented on the State Emergency Management Council who are familiar with agency resources in the area. In response to a request for emergency assistance from a mayor or county judge, the DDC Chairman works with the committee members to identify and commit appropriate state resources to satisfy the request.

2. If a local request for assistance cannot be satisfied with resources available to the Disaster District, the request is forwarded to the State EOC for action by the Emergency Management Council or the DEM staff.

IV. FEDERAL GOVERNMENT AUTHORITY AND RESPONSIBILITIES

A. The Federal Emergency Management Agency (FEMA) is the federal agency that has overall responsibility for the nation's emergency management system and federal emergency management programs as authorized in the Federal Response Plan (FRP). FEMA's national headquarters is in Washington, D.C. and the agency has ten regional offices. The regional office for FEMA Region VI, which includes Texas, is located in Denton, Texas.

B. FEMA's responsibilities include, but are not limited to, the following:

1. Reducing the loss of life and property and protecting our institutions from all hazards through a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery.

2. Coordinating the federal response to disasters that exceed the capabilities of state and local governments and assisting communities in recovering from such disasters. FEMA will not respond to a disaster until an Emergency Declaration is made or there is a request for assistance from a state.

3. Supporting state and local emergency management programs by funding programs for emergency planning, emergency management training, and emergency exercises.

4. Operating the Emergency Management Institute (EMI) in Emmitsburg, Maryland. EMI offers resident courses and seminars for emergency managers and local officials addressing a variety of emergency management topics related to mitigation, preparedness, response, and recovery. EMI supports federal, state, and local field-training activities by developing educational materials for national distribution.

5. Assisting in the development of mitigation programs directed at reducing the impact of disasters and providing technical assistance, training, and grants to government agencies for researching, developing, and implementing such programs.

6. Sponsoring programs that teach the public how to prepare for disaster.

7. Operating the US Fire Administration, which conducts training, public education, and research related to fire protection and emergency response procedures.

8. Operating the Federal Insurance Administration, which makes flood insurance available to communities that agree to adopt and enforce sound floodplain management practices.

CHAPTER 2
THE NEED FOR PLANNING & PLANNING CONCEPTS

I. WHY PLAN?

A common misconception among many is the assumption that an immediate state- and federal-level response will occur if there is a disaster. This may well be the case in the advent of a catastrophic event such as a hurricane, where there is usually sufficient forewarning of the impact to activate and mobilize state and federal assets and pre-stage them for an almost immediate response into the disaster area. However, with the exception of a major hurricane landfall, most disasters will not have an immediate state or federal response. Therefore, it is incumbent upon those planning for a disaster to plans accordingly.

There are numerous reasons to plan for the inevitable effects of weapons of mass destruction that communities face, including the following:

A. Elected leaders are legally responsible for ensuring that necessary and appropriate actions are taken to protect people and property from the consequences of emergencies and disasters. When disasters threaten or strike a jurisdiction, people expect local officials to take immediate action to deal with the problems that are created.

B. The regional hospital emergency response plan outlines concepts of operations for coordinated efforts to perform emergency functions. It has been repeatedly demonstrated that preplanning saves time in getting operations underway, facilitates integrated effort, and helps ensure that essential activities are carried out efficiently.

Hospitals play a critical role in the planning for a bioterrorist event and must coordinate their planning with local public health, local emergency management, local government, and other resources within the emergency management system.

C. A properly prepared emergency response plan will provide those entities that must respond to an emergency with a clear understanding of what they are supposed to do and what others will be doing.

II. WHAT IS AN EMERGENCY RESPONSE PLAN?

An emergency response plan is a document that:

A. Describes the legal basis for the emergency response activities.

B. Outlines the authority and organizational relationships during emergency situations, and describes how actions will be coordinated.

C. Includes a concept of operations for responding to and recovering from emergency situations.

D. Assigns responsibility to organizations and individuals for carrying out specific emergency actions.

E. Identifies personnel, equipment, facilities, supplies, and other resources available within the region.

F. Outlines procedures to request assistance from the State if local resources are insufficient to deal with an emergency situation.

III. WHO SHOULD HAVE A PLAN?

A. Chapter 418 of the Government Code provides that each local and interjurisdictional agency shall prepare and keep current an emergency management plan for its area providing for disaster mitigation, preparedness, response, and recovery.

As part of the emergency management process, hospitals need to interface their planning efforts at the local level as they develop the regional hospital response plan. This planning should fall under Annex H of the local plan.

IV. RELATIONSHIP OF EMERGENCY MANAGEMENT PLANS TO OTHER PLANS

Although the emergency management plan is considered the centerpiece of a comprehensive emergency management program, other planning efforts may address certain issues pertinent to a coordinated emergency response.
The regional hospital planning process will produce an emergency response document that will address issues specific to a response to a large-scale outbreak of a contagious disease. This response plan must integrate into the emergency management plans being developed within the region in order to bring necessary resources into the response.

V. RELATED MATERIALS

An effective emergency management program requires both an emergency management plan and related materials needed to implement the plan. The types of materials that hospitals need to consider are standard operating procedures and letters of agreement and/or memorandums of understanding.

Standard Operating Procedures (SOPs) include organizational arrangements, provide a concept of operation, and contain general task assignments involved in a response.

Letters of agreement or memorandums of understanding are tools that further define how entities will work together in the event of a bioterrorist event, other large-scale outbreak, or other public health threat or emergency.

VI. PLANNING CONCEPTS

There are several key concepts to planning that need to be considered when developing an emergency response plan:

A. Planning should be based on the general rule that an emergency should be met at the lowest and most immediate level of response capability appropriate to the situation. If local resources are inadequate or inappropriate to deal with the emergency situation, assistance can be requested from the State.

B. Although initial planning emphasis has been directed toward a biological event, planning should allow for expanding the plan to an all-hazard approach. This approach is based on the fact that most of the functions performed during an emergency are not hazard-unique. The emergency functions that must be performed are essentially the same regardless of whether the emergency arises from a natural or intentional event.

C. The written plan and its components should explain the overall approach to an emergency situation, define roles and responsibilities, and provide guidance for entities involved in the response.

D. Base the planning on facts and reasonable assumptions.

E. Initial emphasis needs to be placed on response to a large-scale biological event and its impact on the hospitals in the region. The plan should be expandable to include other effects of weapons of mass destruction. In addition, there should be a hazards vulnerability survey to identify other potential hazards that may require a response in your community/region.

F. Planning should address the availability of resources within the region that would be required for a large-scale response to a biological event. Do not assume that you can access needed resources unless you have coordinated with those providers in advance.

G. Departments or agencies that are responsible for certain functions on a day-to-day basis (such as the fire service and law enforcement) typically retain those responsibilities during an emergency. There does need to be a mechanism for accessing state and federal resources in the regional plan, if needed.

H. The development of written emergency response plans is not an end in itself and having a written emergency plan does not guarantee that emergency operations will be effective. But it is always better to have a plan and not need it, than need a plan and not have it.

CHAPTER 3
THE PLANNING PROCESS

I. PRINCIPLES

Developing a regional hospital emergency response plan may appear to be an extremely difficult task. It need not be if the following principles are applied in the process:

A. Hazard analysis is a part of the first step in disaster planning, the idea being that if you know what your community's potential hazards are, you will be better prepared to handle problems involving those hazards. Hazards are generally classified in one of three categories: attack, manmade, or natural. The events of September 11 and the Anthrax events following moved the possibility of attacks to the forefront. Even though initial planning is emphasizing a biological event, it needs to be understood that there is an all-hazard approach to the planning. The causes of emergencies can vary greatly, but the effects do not. This means in our planning we can deal with the similar effects caused by various disasters and weapons of mass destruction. In the planning process, the cascade effect, where one hazard occurrence triggers another, must also be anticipated. The use of multiple effects from a combination of weapons is another consideration when dealing with terrorist and the use of weapons of mass destruction. A part of the analysis involves determining the scope of impact on the community and the health care system. Identification of capabilities and resources are key elements in the evaluation of the region when considering the use of weapons of mass destruction.

B. Use Available Guidance and Planning Materials. There are many resources for planning available from the Division of Emergency Management, the Texas Department of Health and the Texas Education Extension Service at Texas A&M University. Attached resources include the DEM-10 Local Emergency Management Planning Guide from the Texas Division of Emergency Management and the State and Local Guide 101 – Guide for All Hazards Emergency Operations Planning from the Federal Emergency Management Administration (FEMA).

C. There are four stages in the development of general disaster response and recovery plans. The four phases are: Mitigation, Preparedness, Response, and Recovery.

Mitigation - the identification of potential hazards, as well as any means available to lessen the potential impact of these hazards. The overall objective is to eliminate all significant hazards facing a community or to reduce the effects of unavoidable hazards. Mitigation actions not only include responses to known hazards but also an active search for ways to prevent or reduce impacts from new ones.

Preparedness - assures that you are ready to deal with a disaster in your area from the onset. Do you know the resources, both personnel and materials, you have available? Preparation includes training and exercises; as well as reviewing and updating existing plans to fit changing needs.

Response - addresses the immediate unmet needs of the affected population. Does your region have the means to determine the needs to address a major disaster, and specifically an outbreak of a contagious disaease, and then have the resources to meet those needs? If not, do you know from where the needed resources will be coming?

One of the top priorities following a major disaster is an assessment of damages to hospitals, EMS systems and other aspects of the community health and medical system. Assessment of critical needs, along with assessments of health and medical resources, equipment and personnel to meet both immediate critical needs and long-term recovery needs of the affected population are a major part of planning and response activities.

Recovery - includes such things needed to return everything back to a level of normal operation. Short term recovery will allow the hospitals to resume a business as usual posture. Long term recovery may take months or years to complete.

D. Use the Team Approach. Effective emergency planning requires a team effort. The most realistic, and complete, plans are prepared by using a team that includes representatives of the departments, agencies, and groups that will have to execute the plan. In the regional hospital planning process, there should be representatives from local public health, emergency management and others that will be part of the response. Among the benefits of a team approach to planning are:

1. The plan is more likely to pass a common sense check and be accepted and used if the individuals and organizations tasked in the plan have participated in the planning process and their views were considered and incorporated.

2. Involving individuals from the hospitals in the region, local public health, emergency management, local government on the planning team brings expert experience, information, and insights to the planning effort.

3. Coordination among response organizations in the planning process should translate into better coordination and teamwork in emergencies.

E. Involve Local Government Officials. Make sure your local government officials are aware of emergency planning and their role in the process. Explain what you are doing and why; outline your proposed schedule and the assistance you need. This can include local elected officials, appointed officials, and government groups, such as the council of governments.

F. Build on existing planning efforts, if possible. Existing plans can highlight pertinent local legal authorities, organizational arrangements used in the past, and agreements already in place and may provide information on how some planning issues had already been resolved. Build on what is in place. Groups involved in

bioterrorism planning include the local emergency managers, local pubic health, councils of government, etc.

G. Seek Assistance. There are many resources that can assist in this regional planning process. The Division of Emergency Management Regional Liaison Officers (RLO) can provide advice and assistance regarding emergency planning process. Content experts from local public health, emergency management, and hospitals can provide valuable information when looking at how the coordination between entities needs to occur.

H. Take Advantage of Training Opportunities. The Division of Emergency Management, the Texas Department of Health, and the Texas Education Extension Service at Texas A&M University have many courses available related to emergency planning. Many of these courses are free and some are on-line.

II. STEPS IN THE PLANNING PROCESS

A defined planning process is essential to the development of an effective plan. This section discusses planning as a four step process: research, plan development, plan promulgation, and plan distribution.

A. RESEARCH

This step emphasizes the gathering, organizing, and analyzing of information about the characteristics of the hospitals in the region that needs to be considered in the planning process. The regional planning guidance identifies several areas that need to be considered in a coordinated plan.

1. Areas to be considered in regional planning include: Communications and Regional Planning, Medical Operations, Security, Pharmacy, Infection Control, and Patient Tracking and Transportation.

2. Identify Existing Resources - In order to develop concepts for emergency response and recovery, planners should compile a list of the resources, both equipment and personnel, that are available for meeting emergency requirements. This should include resources available through letters of agreement and memorandums of understanding. If it is anticipated that what you have is not adequate for a response, then deficiencies should be identified and additional resources sought during the planning process.

3. Review Existing Planning Documents
    a) Before doing any planning, review existing plans, annexes, standing operating procedures (SOPs), and other emergency-related documents in order to determine if these can be used or modified in your planning.
    b) If existing plans and procedures are realistic, accurate, and complete, then the planning task may simply involve updating those documents rather than preparing entirely new materials.

B. PLAN DEVELOPMENT

1. Organization

a) The preferred planning organization is a hospital planning group overseeing the overall effort, resolving major planning issues, and ensuring various parts of the plan are coordinated. Smaller teams of individuals representing specific content or specialty areas can be called together to work on specific portions of the plan. This approach helps assure the plan is comprehensive
and realistic, with minimal duplication. In this approach, the lead planning entity assumes the role of lead planner. The lead entity should aim to create an atmosphere that facilitates cooperation in plan preparation.
b) Emergency planning is fairly structured process. As with any group of people working together, it is a good idea to lay out for all participants the objectives of the effort, any known assumptions and constraints, the desired format for written products, and a schedule for completion of various tasks. It is important that reference planning materials be available to participants.

2. Methodology. There is no single methodology for this type of emergency planning. The following approach may be useful.

a) Develop a comprehensive list of the tasks that need to be accomplished to successfully respond to a biological event.
b) Identify factors that would adversely affect a response.
c) Determine who should be in charge of the planning and identify how they will initiate the process and direct the effort.
d) Identify the overall set of resources available for emergency response. In developing a plan, all resources available in a region that are subject to being part of the plan should be considered.
e) Identify which entities will carry out the various tasks that must be performed and their capabilities and limitations. Emergency planning should be based on actual capabilities, not wishful thinking.
f) Determine how the efforts of the various agencies carrying out specific tasks should be organized and coordinated to achieve overall success.
g) Formulate a realistic concept of operations for the emergency response.
h) Identify information needed by responders and local officials for preplanning and during the response.

3. Planning Requirements:

a) Regional hospital planning is a requirement by the Health Resources and Services Administration Bioterrorism Hospital Preparedness Program. There are state planning methods that outline

the planning process and it is encouraged that regional hospital plans follow the state guidelines as much as possible.
b) Emergency planning guidelines from the Division of Emergency Management and the Federal Emergency Management Agency are included as resources. There are examples of planning documents and a template included, as well.

4. Plan Preparation: In the development of the response plan there is a four-step sequence, outlined below.

a) The first step is preparation of an **initial draft** of the basic. The working draft might use an existing plan or sample planning document as a beginning point or it may be an new document.
b) The hospital planning group should review and modify the initial draft to produce a **working draft** that it is realistic, accurate, and acceptable to the group members. Necessary graphics, such as maps and organization charts should be added.
c) Once the working draft has been completed, a **review draft** should be provided to the hospitals in the region.
d) The final step is to edit the review draft to address any comments or recommendations provided during the review process and prepare a **final draft**. If the review comments necessitate major changes, it may be desirable to circulate another review draft before going to a final draft. A careful check should again be made to make sure the final draft is consistent with other local planning documents.

C. PLAN PROMULGATION

New or revised emergency response planning documents must be reviewed through the approval process defined for the region. An approved copy will be forwarded to the Manager, Bioterrorism Hospital Preparedness Program at TDH.

D. PLAN DISTRIBUTION

The emergency response plan should include a distribution list that indicates who receives copies of the plan. The plan should be distributed to each element that has a responsibility under the plan and each entity involved in the planning process.

Local Distribution. Copies of the plans should be distributed to all hospitals in the region, copies should also be provided to government officials and set aside for the emergency operating center and other emergency facilities.

1. Consideration should be given to providing copies of the plan on disk to those who want it in that format.

2. If the jurisdiction has its own local area computer network or web site, It may be desirable to post the plan on the network or web site.

III. PLAN MAINTENANCE

Once the regional response plans are developed, a system of maintenance must be established to ensure they are kept current.

A. Requirements - The regional hospital response plan should be **reviewed annually** and must be **updated at least every five years** by revision or change.

B. Review & Update –

1. Review - The hospital emergency response plan should be reviewed annually by the hospital planning group. There also needs to be a process for distribution of revisions or changes.

2. Update

a) Changes should be made to plans and annexes when the documents are no longer current. Changes in planning documents may be needed:

1) when hazard consequences or risk areas change;
2) when the concept of operations for emergencies changes;
3) when departments, agencies, or groups which perform emergency functions are reorganized, can no longer perform emergency tasks laid out in planning documents;
4) when warning and communications systems are upgraded;
5) when additional emergency resources are obtained through acquisition or agreement, the disposition of existing resources changes, or anticipated emergency resources are no longer available;
6) when a training exercise or an actual emergency reveals significant deficiencies in existing planning documents; or
7) when state planning standards for the documents are revised.

b) Methods of Updating Planning Documents

1) Plan Revision. A revision is a complete rewrite of an existing plan or annex, resulting in an essentially new document. Revision is advisable when numerous pages of the document have to be updated, when major portions of the existing document must be deleted or substantial text added, or when the existing document was prepared using word processing program that is obsolete or no longer available. Revised documents should be given a new date and require new signatures by local officials.
2) Plan Change. A change to a planning document involves updating portions of the document, normally by making specific changes to a limited number of pages. Changes are typically

numbered to identify them and issued to holders of the document with a cover memorandum that has replacement pages attached. The cover memorandum indicates which pages are to be removed and which replacement pages are to be inserted in the document to update it; see Figure 3-2 for a sample of a document change memorandum. The person receiving the change is expected to make the required page changes to the document and then annotate the Record of Changes at the front of the document to indicate that the change has been incorporated into the document. A change to a document does not alter the original document date; new signatures on the document need not be obtained.

IV. TESTING YOUR PLAN

A. Testing your plan during a drill or exercise is the best way to identify problem areas and evaluate preparedness without actually experiencing a disaster. All drills and emergency management exercises should include some sort of post-exercise critique help to identify shortfalls in planning—problems in organization or operational concepts and procedures that don't work well in practice. These shortfalls should be addressed in the next iteration of the local planning process.

There are five types of exercises generally used:

1. Orientation seminar. Provides instruction to participants about roles, relationships and responsibilities. Has a multi-format (examines all aspects of the plans) and is non-stressful. It is designed for all levels of professionals, the public and special interest groups. It also applies corrective actions resulting from actual events or other exercises.

2. Drill. Generally used to practice a single activity. The purpose is to develop skills or to correct a specific process or procedure. It involves physical activities by action or response personnel. It is intended to be non-stressful, but has defined time limits.

3. Tabletop exercise. Usually a non-stressful problem solving exercise. It works out details of generalized operations and applies multi-agency coordination considerations. Usually involves coordinators and policy makers. It is used to evaluate the adequacy of draft EOPs or annexes.

4. Functional exercise. This type evaluates a system or systems in a stressful, time sensitive simulation. A functional exercise requires an understanding of roles, responsibilities and operations by all participants. It usually evaluates one or more functions of the plan and involves coordinators and often will include policy makers. These exercises require extensive preparation and a team for the conduct and evaluation of the exercise. They will also involve a direction and control function and usually some degree of EOC activation.

5. Full-scale exercise. This type adds field response units to previously evaluated functions. It requires extensive preparation and exercise team

training. A full-scale exercise is intended to be time sensitive and stressful and will usually have high public visibility. It will involve all levels of participation and will involve activation of the EOC.

B. You also test your plan when you respond to an actual emergency or disaster. Emergency responders who observe problems attributable to unworkable or incomplete plans and procedures should be encouraged to identify those problems as soon as they become evident. A formal post incident review should be conducted after any major emergency or disaster to identify lessons learned; such reviews should specifically consider the adequacy of the current plan. If deficiencies are identified, then you are due for another round of planning to fix them.

CHAPTER 4
FORMAT & CONTENT OF HOSPITAL EMERGENCY RESPONSE DOCUMENTS

I. REGIONAL HOSPITAL EMERGENCY RESPONSE DOCUMENTS

A. Emergency response documents should consist of the response plan and any supporting documents. The plan and its supporting documents should answer the questions of what, why, who, when, where, and how.

1. Response Plan. The response plan should be a document that cites appropriate legal authority for an emergency response, outlines the emergency organization and policies, provides a general concept for emergency operations, and assigns general responsibilities for emergency planning and response operations.

2. Annexes. Provide information and direction for specific actions. The annexes narrow the focus on operations with more detailed specifics about the response to that particular function. Annexes emphasize responsibilities, tasks and procedures. They are tailored to individual agencies and provide a means of direction and control for agency operations during disasters. Appendices further detail response and recovery operations and designate responsible agencies.

3. Supporting Documents. The response plan is further supported by documents such as letters of agreement and memorandums of understanding. These documents establish relationships and responsibilities in the event the plan is activated.

4. Standard operating procedures (SOPs) provide detailed instructions that an need to be followed to perform specific functions in an emergency response. They are not typically part of the plan, but may be referenced in the plan.

II. PREPAREDNESS & PLANNING

Hospital emergency response planning should be a part of emergency management planning and incorporated into local emergency management plans. This requires cooperation and collaboration with local emergency management planners and others planning for emergency situations.

III. PLANNING DOCUMENT FORMATS

There is not a requirement that a specific format be used for hospital emergency response plans. The Division of Emergency Management has guidelines and sample plans that are prepared in a uniform outline format. It is recommended that your planning documents be prepared in a more or less similar format. This approach:

- Saves time and effort by using an established format that allows planners to tailor the plan to local needs.

- Simplifies discussion of planning issues among those involved in the planning process.
- Facilitates discussion of planning issues and resolution of planning questions between those involved in the planning process
- Simplifies the maintenance and status of the planning documents.

IV. ELEMENTS OF THE BASIC PLAN

The response plan should provide an overview of the emergency concepts of operation, outline the organization to be followed in a response, identify emergency tasks to be performed, and assign responsibility for those tasks. The following is a sample of the format of a response plan and a description of what goes into each section.

A. INTRODUCTORY MATERIAL

1. Cover. Should identify who is covered by the plan.

2. Approval and Implementation Page
    - Introduces the plan, outlines its applicability, indicates that it supercedes all previous plans.
    - Should include a date.
    - Must be signed by hospital planning committee or its designee

3. Record of Changes

4. Table of Contents

B. SECTION I – AUTHORITY

The authority for a hospital to conduct disaster planning efforts is found in Annex H – Health and Medical of the local emergency management plan. State and federal authorities are found in addressed in Annex H.

C. SECTION II – PURPOSE

This section should contain a general statement of what the hospital emergency response plan is meant to do and identify the jurisdictions that are covered by the plan. The statement should be supported by a brief synopsis of the response plan and its supporting documents.

D. SECTION III – EXPLANTION OF TERMS

1. List and explain acronyms used in the response plan.

2. List and explain abbreviations used in the response plan.

3. Define terms used in the response plan that are unique to this plan.

E. SECTION IV – SITUATION AND ASSUMPTIONS

1. Situation. This section characterizes the planning environment and makes it clear why emergency planning is necessary. The statement includes a set of facts upon which the plan is based. The situation statement should summarize the threat and the potential impact on people and property, making reference to more detailed information pertaining to weapons of mass destruction or other emergency that would activate this plan.

2. Assumptions. Assumptions are reasonable suppositions that have been treated as being true for purposes of planning for an emergency response. For example, one may assume that external resources covered by a mutual aid agreement will be provided when requested because that has generally been the case, but on occasion they may not be available because they have been committed elsewhere. Such assumptions are made explicit in the plan to indicate the limitations on planning and indicate to users that the plan may have to be adjusted during the implementation phase if the some of the assumptions used in its preparation prove to be incorrect.

F. SECTION V – CONCEPT OF OPERATIONS

1. This section should outline the objectives of the hospital emergency response plan, summarize the emergency responsibilities of those involved, and describe the general approach to an emergency response by hospitals. The concept of operations should address the response to biological event, but have the flexibility to expand to other effects from weapons of mass destruction. It should indicate how the emergency response plan would be activated and under what conditions. This section should also describe the emergency powers that can be activated by local government and how they are invoked and describe assistance available pursuant to mutual aid agreements and from the state and federal governments and identify who may request assistance and under what conditions.

2. This section should outline the general activities to be performed during the four phases of emergency management – mitigation, preparedness, response, and recovery.

3. The concept of operations needs to address issues relating to warning, direction and control, and resource management. The focus areas of Communication and Coordinated Regional Planning, Medical Operations, Security, Pharmaceuticals, Patient Tracking, and Infection Control should be addressed in this section.

G. SECTION VI – ORGANIZATION & ASSIGNMENT OF RESPONSIBILITIES

1. Organization. This section should describe the organizational structure that will respond in an emergency situation involving the effects of weapons of

mass destruction. A organizational chart depicting the structure and lines of authority should be provided.

2. Assignment of Responsibilities for Emergency Functions. This section should summarize the tasks required to accomplish various emergency functions and assign responsibility for those tasks. The plan should include a matrix showing the primary and supporting responsibilities of various departments and agencies involved in a response.

H. SECTION VII – DIRECTION AND CONTROL

1. This section is primarily concerned with emergency response operations. It should define who is in charge of the hospital emergency response program and delegate authority for managing specific emergency activities during plan activation. It should specify who has the authority to request external assistance. This section should outline how hospitals will interface with the Incident Command System and the local Emergency Operations Center, if it is activated, and describe how their efforts will be coordinated.

2. This section should also include a summary how the hospital response interfaces with the emergency powers of local government and emergency management.

I. SECTION VIII – LEVELS OF RESPONSE

Hospital emergency response to the effects of weapons of mass destruction may be the result of an event, or may build gradually over time, as with a biological event. Response actions should increase as the effects of the event begin to impact the health care system. The response plan should include a system that outlines response levels based on the impact on the hospitals. The response plan should define the levels of response based on hospital capabilities within the region and outline the general emergency actions appropriate.

J. SECTION IX – ADMINISTRATION & SUPPORT

This section of the plan covers general administrative requirements and the availability of services and support within the region.

1. It should outline general policies for administering resources, including requirements for tracking the source and use of resources and expenditures during emergencies. It should reference any letters of agreement or memorandums of understanding that exist and indicate who is authorized to activate those agreements. There needs to be contingencies for dealing with personnel credentialing between facilities and for bring in medical personnel from outside the hospital. Reference should be made to administrative requirements for emergency purchasing procedures and acquiring needed supplies from distributors.

2. This section should also:

a) Outline procedures for requesting assistance from the State in the event local resources are insufficient to handle an emergency or disaster
b) Establish requirements for periodic situation reporting to the local Disaster District during major emergencies, with reference to a standardized reporting format.
c) Establish requirements for a post-emergency review of major emergency operations.

K. SECTION X – PLAN DEVELOPMENT & MAINTENANCE

This section should establish policy and procedures for review and update of the plan. It should identify who is responsible for developing and maintaining the emergency response plan and for approving and implementing it.
Identify responsibility for developing and maintaining the support documents associated with the plan.

L. ATTACHMENTS TO THE BASIC PLAN.

The following materials should be attached to the basic plan:

1. Attachment 1 – Distribution List (the distribution list for the plan).
2. Attachment 2 – References (a list of pertinent references).
3. Attachment 3 – Organization for Emergencies (a graphic depicting the local emergency organization).
4. Attachment 4 – Incident Command system (ICS) Summary
5. Attachment 5 – Functional Responsibility Matrix (a table outlining responsibilities for various emergency functions.
6. Attachment 6 – Supporting Documents (lists the supporting documents and responsibility for developing and maintaining them).

Additional attachments may be added by the hospital planning groups to meet the needs in their regions.

M. ANNEXES

The annexes are intended to allow a region to tailor their plan to the resources available within their region. There are several standard annexes that will be addressed in the basic plan and each plan should address the regional approach to these issues. They include:

1. Communication and Regional Planning
2. Medical Operations
3. Security
4. Pharmaceuticals
5. Patient Tracking and Transport
6. Infection Control

Each of these is addressed in the guidance. Additional annexes may be added by the regions to address other issues identified by the hospital planning group.

N. Standard Operating Procedures are not generally part of an emergency operations plan, but can be referenced in the plan and included as attachments. These procedures could address specific responsibilities concerning such things as decontamination of patients, sudden influx of a large number of patients, psychological support, dealing with the media, discharge planning, and post-mortem care.

CHAPTER 5
SUGGESTIONS FOR PREPARING HOSPIATL EMERGENCY RESPONSE PLANNING DOCUMENTS

I. GENERAL

This section provides a number of suggestions regarding preparation of plans and supporting documents.

II. ORGANIZATION

A. The response plan is organized:

1. Response plan text
2. Attachments, which are numbered
3. Tabs, which are designated by letter

B. Supporting documents

C. The response plan should be prepared in outline form using the following scheme:

1. 1st level: roman numerals: I, II
2. 2nd level: capital letters: A, B
3. 3rd level: arabic numbers: 1, 2
4. 4th level: lower case letters: a, b
5. 5th level: arabic numbers in parenthesis or parenthese: 1), 2) or (1), (2)
6. 6th level: lower case letters in parenthesis or parentheses: a), b) or (a), (b)
7. beyond the sixth level, lower case roman numerals (i, ii, iii) or underlined arabic numbers (1, 2, 3) are typically used.

III. FORMAT

A. Page size: normally 8 ½ by 11 inches.

B. Margins:

1. at least .7 inch top and bottom; 1 inch is more typical
2. at least 1 inch on the left to provide for binding or three hole punching
3. at least .7 inch on the right; 1 inch is more typical

C. Font size: normally 11 or 12 point

D. Spacing: text is normally single spaced, with double spacing between paragraphs.

E. Page numbering:

1. For the basic plan:
    a) Plan: lower case roman numerals for introductory pages: i, ii, iii

b) Plan: arabic numbers for the main portion of the plan: 1, 2, 3
c) Attachments: appendix number, dash, page number: 1-1, 1-2, 1-3
d) Tabs: prefix consisting of appendix number and tab designator, dash, page number: A1-1, A1-2, A2-1

2. When it is necessary to add an additional page to an existing document without renumbering subsequent pages, such pages are typically numbered with an lower case alphabetic suffix to the page they follow. For example, a page added after an existing page A-5 would be numbered A-5a.

IV. OTHER SUGGESTIONS

A. Numerals. Spell out numbers smaller than 10 and use numerals for 10 or greater.

B. Names. As the individuals who occupy particular positions change fairly frequently, use position titles rather than names in planning documents.

C. Acronyms. Spell out the entire name and include the acronym in parentheses the first time it is used. *Example:* the Division of Emergency Management (DEM).

D. Illustrations & Tables. Illustrations and tables incorporated into the text of a document should be given a figure or table number and a title.

E. Revision or Change Markings. Where copies of plans and annexes will be widely distributed, it is often a good idea to indicate the revision number or change number as a footer in the lower left or right of each page to facilitate quickly checking a document to see if it has been updated.

F. Maps

1. Where possible, use the same type of maps in the plan that will be used by emergency responders.
2. Maps should be large enough for the information on them to be usable by the reader. If necessary, use foldouts or divide large maps into sections on separate pages.
3. All maps should include a north arrow, legend, and scale.

CHAPTER 6
SUBMITTING HOSPITAL EMERGENCY RESPONSE PLANNING DOCUMENTS

I. BACKGROUND

The development of regional hospital emergency response plans is a process directed by the Texas Department of Health. The Hospital Planning Groups are developing the plans based on needs within their regions. The response plans should be reviewed by other agencies involved in the planning process and should include local and regional public health, local emergency management, and local government and councils of government. The intent is to have an integrated plan that includes all agencies responsible for a response plan to weapons of mass destruction. Each Hospital Planning Group should establish an approval process for their plan.

II. REVIEW OF PLANNING DOCUMENTS

A. When response plans are prepared or updated, copies of those documents should be provided to your all agencies involved in the development of the plan.

B. The review of these documents should be documented and kept on file by the Hospital Planning Group.

CHAPTER 7
PLANNING STANDARDS

I. BACKGROUND

The Division of Emergency Management has adopted standards for local emergency management plans pursuant to §418.043(a) of the Texas Government Code.

II. PLANNING STANDARDS

A. Current Standards & Sample Planning Documents

1. State planning standards and criteria for the local emergency management planning is provided by the Division of Emergency Management. The standards are in DEM-10, which is attached as part of this document. Also included is the FEMA State and Local planning guide. These can be used as resources in developing the regional hospital response plan.

2. There are some examples of how plans have been developed that may be useful in the regional planning process.

LIST OF ATTACHMENTS

Attachment 1:	DEM – 10 (Located on the CD)
Attachment 2:	SGL 101 (Located on the CD)
Attachment 3:	Annex H with Appendices (Located on the CD)
Attachment 4:	Regional Hospital Plan, Washington State Department of Health
Attachment 5:	Texas Regional Hospital Emergency Response Plan Template

Communications and Coordinated Regional Planning

- **Purpose:** This guidance document is intended to provide recommendations as to how a hospital can participate in their regional disaster planning and preparedness activities and general communications recommendations related to crisis situations and incidents involving exposure to biological agents.

- **Staff:** The hospital's Chief Executive Officer, Chief Nursing Officer, Public Information Officer, emergency management staff, and the hospital manager directly responsible for hospital communications/public relations services and the administrator to whom he or she reports.

- **Recommendations:** It is vital for acute care hospitals to actively participate in their regional disaster planning and preparedness activities. Adequate healthcare services will be critical should a biological agent be released in the region. The hospital's success in responding to a biological event will directly correlate with how well the hospital and region have coordinated their disaster response planning.

  Planned and structured arrangements for communication throughout the incident and during its response are critical components of hospital and regional preparedness. A hospital's ability to maintain control of the situation, preserve patient and situation confidentiality, ensure rumor control, and allay fears of the patient/family members, staff members and the public is critical. This is possible via a well-defined crisis communication plan that addresses roles of authority, focuses on the patient care mission, and includes plans for addressing communication needs as the event unfolds.

Guidance

I. Coordinated Regional Activities

It is best to establish working relationships with regional partners before an emergency situation arises. Regional partners that should be identified would include but are limited to local public health officials, emergency management, other hospitals, clinics, schools, and local emergency planners. Beyond simple contact lists, health agencies may wish to develop and maintain a partnership manual which maps regional resources that are available during a crisis.

A. Incident Command Systems: HEICS
To effectively communicate and participate in a regional incident response, it is essential that the hospital's incident command system be coordinated with that of other emergency responders. The hospital incident command system was developed to match that of other responders and is known as the Hospital Emergency Incident Command System (HEICS). The HEICS process and terminology should be a framework for the hospital incident response leadership and communication.

B. Model Emergency Management Plan (Appendix G)
1. This plan is designed to assist facility administrators to develop a standardized plan that reflects current regulatory requirements.
2. This Plan provides for coordination and cooperation with city/county emergency managers in accordance with current regulation.

C. Communication with Hospitals, Media and the Public
1. Be sure to achieve coordination between hospital regions and communication systems in order to ensure coverage in border areas.
2. Identify and develop messages and materials (and corresponding translations for foreign language communities and special groups of audiences) that address staff, media and public needs.
3. Plan for other factors that affect people's ability to receive, act upon, or understand emergency public information (e.g. sight or hearing impairments).
4. Develop periodic meetings with police, fire, and EMS officials.
5. Designate a Public Information Officer (PIO) for the hospital
6. Identify a plan for alerting and notification of various personnel and agencies in the event of a specific type of regional emergency.
7. Consider adoption of a Hospital Emergency Incident Command System (HEICS) during emergency events to facilitate clear communication lines internally and prior to identification of external media spokesperson.
8. Hospital PIO's should release only information that is related to hospital operations. Until the LHD confirms that an event is evolving, all media inquiries should be directed to the LHD. Once the event is confirmed the release of all information should be coordinated between the hospital PIO, public health and the EOC.

9. The media will play a key role in educating the public about a bioterrorism event. The dissemination of inaccurate information could impede the provision of patient care. The media should be provided with as much credible information about the events as possible.

D. Responsibilities of the designated Public Information Officer
   1. Use a broad range of resources to disseminate information to disaster victims and the general public, possibly including the FEMA Radio Network, broadcast fax, the internet, as well as traditional print and broadcast news media;
   2. Maintain contact with and gather information from federal, state, local, and voluntary organizations taking part in emergency response operations (see appendix);
   3. Handle appropriate special projects such as news conferences and press operations for disaster area tours by FEMA officials and others;
   4. Provide public affairs support and advice to the Federal Coordinating Officer, if one is involved in the emergency response;
   5. Credential press personnel when necessary to control access to sensitive areas; and
   6. Coordinate with logistics staff to provide basic facilities to assist the news media in disseminating information to the public and to credential media representatives (if deemed necessary).
   7. Ensure that non-English-speaking populations receive accurate and timely information about emergency response and mitigation operations through appropriate news media and, to the extent possible, in their languages.

E. Communications between hospitals and outside emergency organizations
   1. Within the healthcare region, hospitals have an opportunity to use their existing emergency medical services (EMS) and trauma coordination as a framework within which to build expanded relationships for mass casualty preparedness. The existing programs provide a framework for communications linkages, pooling financial and other resources and data collection and sharing.
   2. Communities and regions should create and/or link data reporting systems to provide a region-wide assessment of health needs and resources.
   3. Mass causality incidents will increase demands simultaneously on all of the regional health resources.
   4. There will not be adequate time or unused personnel to survey hospitals, regional health centers, multi-specialty clinics, medical staff physicians' offices, nursing homes and public facilities to inventory capabilities after the incident begins.
   5. Data systems, which have a common architecture to integrate "streaming" data from institutional operations, will provide the best means of matching regional needs to available resources.

F. Monitor all emergency department and outpatient visits to detect outbreaks
   1. CDC encourages and funds developing monitoring systems and provides hospitals with algorithms and methodologies to automatically monitor health information and detect aberrations and/or outbreaks weeks before conventional surveillance

systems.

2. Coordinate with the Texas Department of Health (TDH) and the Texas Association of Local Health Officials (TALHO) efforts to establish a Texas Electronic Disease Surveillance System (Based on the National Electronic Disease Surveillance System (NEDSS) Architectural Standard). Pilot project for Tex-EDSS are currently underway.

II. Internal Hospital Communications

A. Bioterrorist (BT) Event Suspected
   1. The medical record of patient(s) with similar symptoms currently seeking treatment should be reviewed and the clinical information documented.
   2. This information may assist the Local Health Department (LHD) in determining if the event is bioterrorism-related or due to a clinical syndrome occurring concurrently in the region such a viral gastroenteritis or influenza.
   3. The information should be discussed with members of the hospital's primary response team (e.g. hospital administrator, Infection Control Practitioner (ICP), and hospital epidemiologist).
   4. If at this time, a bioterrorism event is suspected, the administrator should designate a leader, preferably a physician or the ICP, to communicate with the LHD.
   5. The recommendations of the LHD should be documented and discussed with the hospital's primary response team.

B. Notification Process
   1. A bioterrorist event may be suspected by a physician, staff nurse, laboratory technologist, radiologist, ICP or other hospital personnel.
   2. The first person to suspect that an event is evolving should immediately communicate their suspicion to a direct line supervisor, department manager or director and a member of the Hospital's primary response team.
   3. After normal business hours including weekends and holidays, administrative personnel such as the nursing supervisor or the administrative officer of the day should be contacted. This person should assume responsibility for notifying the appropriate members of the Hospital's primary response team.
   4. Unusual or unexplained illness that could be the result of a bioterrorism incident or an infectious disease should be reported to the local health department immediately. If there isn't a local health department in your jurisdiction report illnesses to the Regional Texas Department of Health office of TDH in Austin.
   5. Document and discuss LHD recommendations.
   6. The goal is to communicate credible information about the evolving bioterrorist event to the LHD within two (2) hours of initial suspicion.

C. Internal Response
   1. Notify BT Response Team members

2. Activate "Log of Events" (The Log notebook should document any unusual events, e.g. telephone threat, media inquiry or increase number of persons seeking medical care.)
3. Monitor Emergency Department (ED) admissions.
4. Report new cases to LHD.
5. Initiate isolation precautions, if necessary.
6. Inform and assure staff.

D. BT Event Confirmed:
1. Notify BT Response Team members
2. Activate your facilities' BT Response Plan and Disaster Preparedness Plan
3. Assign responsibilities
5. Notify DHS, Licensing and Certification District Office (Reportable event)
6. Confirmation that the definition of a bioterrorism event has been met will require consultation among local, state, and federal public health officials. This may take several hours.
7. The hospital may want to delay implementation of the hospital disaster preparedness plan until the LHD confirms that an event is in progress.
8. The Hospital's primary response team should activate a "Log of Events". The "Log" (notebook) should document any unusual events (e.g. telephone threat, media inquiry or increase number of persons seeking medical care).
9. All new cases must be reported to the LHD.
10. Staff should be counseled not to communicate with the media.

III. Response System Activation – It is essential that hospitals know how to activate their local emergency response system if a biological incident is suspected. Once the local system is operational, all requests for assistance must go through the local emergency response system in order to activate state and federal resources. The hospital's ability to acquire state and federal assistance is dependent on the activation their local emergency response system. Through the integration of the emergency response systems across the state, the acquisition of state and federal resources can be directed to the affected more quickly and effectively.

A. Response system activation is a process of activating essential resources to respond to a large-scale biological event. Activation of some essential resources has to be done through a formal emergency management activation, which begins at the local level and moves through a systematic process to the federal level.
1. Hospitals need to understand the emergency notification process for their region and how they fit into the response system.
2. Initial notification must include the local public health authority and activation of the local public health response team and the regional Epidemiological Response Team.
3. Hospitals should activate their internal response plan for initial care pending confirmation that a large-scale event is in progress.
4. Once confirmed, the regional response plan will be activated.

B. Regional response system activation is guided by the regional response plan. This should activate the regional emergency operations response plan. Local public health becomes the lead agency in a biological event and local emergency management coordinates needed resources.

C. Once the local emergency management system activates, they notify the state emergency management response system. The Emergency Operations Center is activated with TDH being the lead agency in a biological event.

1. The Commissioner of Health for the State of Texas is appraised of the situation and makes determination of the need for system resources. The Commissioner will advise the Governor on the recommended resources needed by the local public health authority.
2. The governor will act on the level of disaster as recommended by the Commissioner.

IV. State Response and Asset Utilization

A. Any incident that has the potential to overwhelm the local resources will require notification of state response agencies.
   1. The government of the State of Texas has the responsibility to assist local jurisdictions with response coordination and resource augmentation.
   2. Specific response actions include:
      a) District Disaster Coordinator notification and liaison with local Emergency Management.
      b) Activation of the state EOC and the Health/Medical ESF.
      c) Request for federal support, such as the National Disaster Medical System and the Disaster Medical Assistance Teams.
      d) Request activation of the Texas National Guard for local assistance.
      e) Request activation of the state and national pharmaceutical stockpiles.
      f) Coordination of all essential state resources to support the local response.

V. Federal Response and Asset Utilization

A. The State of Texas will request assistance from the U. S. Government when it appears that local and state resources are required. This request, when accompanied by a Presidential declaration, sets into motion a large array of available resources.

B. Federal assets include:
   1. Activation of the Management Support Unit at the V.A. Hospital to coordinate local area medical response assistance.
   2. Activation of the Regional Operations Center to coordinate federal medical resources.
   3. Delivery of the National Pharmaceutical Stockpile.
   4. Deployment of Disaster Medical Assistance Teams.

5. Deployment of the Disaster Mortuary Teams.
6. Deployment of military assets as needed.
7. Deployment of Mental Health Teams from the Red Cross.

VI. Electronic Monitoring of EMS and Hospital Resources

A. A regional awareness of local area EMS resource limitations and hospital capacity is vital to effective management of daily EMS system demands and mass casualty incident situations.

B. Plan for electronic tracking and communication of emergency and mass casualty event management resources status (beds, staff, ambulances, vaccines and drug stockpile, etc) with other collaborating state and local entities or statewide communications systems. Web-based and secured systems can share timely information with all collaborating parties.
   1. Ensure this information will be updated continuously to maintain currency and accuracy.
   2. Establish and test manual backup tracking and patient census systems in the event of a power or IT failure, or if biologic contamination causes relocation of the admitting or bed tracking functions or departments.
   3. As an example, plan for a web-based secure and password-protected means of managing bed counts and availability of resources (and a directory of key information and contacts) with ability to interface with other web-based systems to share information among other hospitals and public safety authorities.

VII. Electronic Communication Systems

A. Acquire or arrange access to radio equipment with communications capabilities to allow conversation between the hospital local health department and emergency management officials, emergency medical system offices or ambulances, fire, law enforcement and/or other hospitals or healthcare providers.
   1. Consider establishing a separate emergency communications center to house two-way radio equipment, including HAM (handheld amateur radio), and the radio operators, remote from the primary point of entry from victims. Establish provision for routine preventive maintenance.
   2. Plan for addressing gaps in the communications systems among hospital emergency departments, outpatient facilities, EMS (emergency medical system) systems and State and local emergency management, public health and law enforcement agencies, as they relate to bioterrorism response.
   3. Ensure secure electronic exchange of clinical, laboratory, environmental and other public health information in standard formats between the computer systems of public health partners.
   4. Assess the existing capacity to exchange electronic data in compliance with public health information and data elements exchange standards, vocabularies, and specifications as referenced in the National Electronic Disease Surveillance System (NEDSS) initiative.

5. Ensure that the technical infrastructure exists to exchange a variety of data types, including possible cases, possible contacts, specimen information, environmental sample information, lab results, facilities, and possible threat information.
6. Regularly confirm (acknowledge) the successful transmission and receipt of information to and from public health partners.

B. Standards-based communications systems include:
   1. Alternate telephone system (landline),
   2. Two-way radios,
   3. Cell phones,
   4. Electronic mail,
   5. Voice mail boxes,
   6. Satellite phones, or
   7. Wireless messaging.

C. Existing systems may be overloaded or everyday communication systems may fail during a mass casualty incident.
   1. Landlines are the primary and most commonly used means of communication during emergencies.
   2. Create back-up telephone system.
   3. Organize a runner, messenger system with proper personnel as a backup for electronic communication systems in case of a devastating power failure.
   4. Provide schematics of the area layout maps showing key areas for disaster operations. Make hard copies of these maps and key directory information readily available.
   5. Create an inventory of all communications devices available, including manual systems and runners, intended use, and triggers to cause making the systems operational during emergency conditions. Include this information in disaster manuals or emergency operations policies for wide readership and understanding.
   6. Routinely assess the timeliness, operability and reliability of the redundant methods of communication as well as validity and reliability of the key directory information. Activities that may be considered:
      a) Inventory existing communication capabilities in relation to existing standards.
      b) Routinely assess the delivery of e-mail messages to recipients with documentation that the messages have been read.
      c) Regularly exchange directory information with key stakeholders and partners.
   7. Ensure that the directory information is up to date and complete.

VIII. Communication Systems Training

A. Implement or adopt a curriculum to ensure the efficient use of all communications modalities. Web-based training would allow any registered emergency worker to become familiar with the communications capabilities available to hospitals.
B. Utilize Hospital Emergency Incident Command Systems (HEICS) Training.

C. Utilize TDH/THA sponsored risk communications training.

Summary:

At the end of this planning process, your plan should include:

1. Description of the methods that will be used by facilities and support organizations to communicate with one another, in rank order of availability as systems fail.
2. Identification of local/regional agencies responsible for emergency management and local disaster readiness.
3. Information on how you are interfacing with local emergency management planners, identifying community and regional resources, and establishing a process for accessing local, state and federal resources through the emergency management system.
4. Indication of methods of communications that will be initiated within participating facilities in time of emergency (walkie-talkie, etc.)
5. Description of the plan to regularly test the communications component of the regional response plan.
6. Useful evaluation documents such as press coverage summaries and/or clips, a summary of public reaction and concerns (based on telephone inquiries to the public health agency, etc.) and a final chronology of events.
7. The development or identification of a communications network within your region to share information and resources.
8. Description of how HEICS will be used as a primary method of communication.

Action Items for Communication:

Actions	Assigned To	Completion Date
1. Communication Guidelines:		
a. Prior to a crisis, determine how key hospital staff – including the Public Relations staff – are notified in an emergency. Identify the Public Information Officer and introduce him/her to all hospital staff.		
b. Where will your media communications team be situated? In your office headquarters? With the media? Divided up? How will you communicate with each other?		
c. Do not rely on cell phones or two-way communications (walkie-talkies) to communicate with your staff. If they don't work in a crisis due to system overload, you should have an alternate plan, such as a designated runner in place.		
2. Keep all but essential hospital staff from entering the hospital during a crisis. This includes visitors such as the media.		
3. Have a designated media site		
a. Ideally, you should have a designated place outside of the hospital, or remote from the primary point of patient arrival or decontamination.		
b. During inclement weather, you may want to set up the media in an auditorium or conference room.		
c. Don't let the media roam the hospital at will. This will only add to the chaos.		
d. Identify media representatives authorized to be on-site with hospital – issued credentials (ID card).		
4. Determine Spokesperson(s)		
a. Before a disaster happens, a spokesperson should already be determined and media trained.		
b. Have a bilingual spokesperson for the Spanish-speaking media		
c. No one else should speak for the institution		
d. Set up scheduled times to report breaking news/information to the media. Give the reports at the designated media site.		
e. Designate spokesperson depending on information provided, for example; general information (PR) director, medical information (physician); policy or high-level information (CEO). Ensure that all hospital staff knows to speak with the media only with PIO input or approval.		

5. Type of Information		
a. Determine what type of information you are going to release and stick to it		
b. Number of patients		
c. Gender of patients		
d. Age		
e. Condition, etc.		
6. Emergency Information		
a. Determine what agency is giving out emergency information. (This needs to be coordinated with the Public Information Officer at the Incident Command Center.)		
b. Important health information may be needed to be distributed for people in general population via the media.		
c. What has happened, what are the symptoms to look for (rash, fever, diarrhea, etc)		
d. Limit the information you give out to patient information only – good, fair, serious, critical		
7. City-wide Command Post		
a. Where is the citywide command post located?		
b. How do you get/give information from/to them?		
c. Who is their spokesperson?		
d. When and where are their press conferences held?		
8. Other Agencies/Hospitals		
a. Before a disaster occurs, have a list of all health agencies and hospitals in your area		
b. Know whom they are, how to reach them in an emergency (pagers, director numbers, etc.)		
9. Local Media		
a. Have a list of main newsroom numbers in the event you need to give them vital information. This includes TV, radio, newspapers and the wire services.		
b. Establish a working relationship with medical reporters. Have phone, pager numbers available		
c. Local media may try to enter the facility to talk to patients, family members, and/or staff. Make sure security is posted at entrances.		
d. Give all members of the media the same information		
e. Do not favor one media outlet over another.		
f. Local media will try to get to previous hospital sources – remind staff that they are not to speak to the media.		
10. National Media		
a. Will often hire freelancers or use the local network affiliate for the report.		

b. Will need basic information on your facility – type of hospital, number of beds, size of burn or trauma units – along wit specifics on numbers of patients, conditions, etc.		
c. Tend to be more "pushy" than local media		
11. Meeting the Media's needs		
a. Deadlines		
b. Visuals		
c. Media center established with access to phones, fax machines, computer hook-ups.		
12. Long-Term Media		
a. Following a disaster, media will continue to call for follow-up interviews and condition reports of patients.		
b. Identify spokespeople who will continuously provide interviews and information to the press.		
13. Be Prepared		
a. Disasters don't usually occur during regular business hours; they rarely conclude by the end of the business day		
b. Consider how to handle an event that stretches into several days. Can you stagger the times your staff is on active duty to ensure they are mentally and physically rested to the extent possible? Can you call in back-up support to help relieve the first-line team?		
c. Do you and your staff have a change of clothes and personal toiletries at the office?		

Action Items for Coordinated Regional Planning:

Actions	Assigned To	Completion Date
1. Meet with the safety director, CNO, ED director, and emergency services medical director to review readiness status	CEO	
2. Ensure that a qualified/competent individual has been appointed to coordinate emergency management planning	CEO	
3. Determine whether hospital has a Memorandum of Understanding (MOU) with NDMS to provide beds for patients evacuated from a region overwhelmed by a disaster	CEO	
4. Appoint a multidisciplinary group with appropriate representation to be involved, support primary emergency management coordinator.	CEO/CNO	
a. Ensure monthly meetings are held with good attendance by all.		
b. Ensure reporting at least quarterly to CEO and board.		
5. Conduct review of disaster plans.		
a. Ensure hospital disaster plans are based on state/regional Hazard Vulnerability Analysis.		
b. Ensure that incidents involving biological agents are specifically addressed		
c. Ensure that hospital disaster plans reflect coordination with regional plan(s).		
d. Ensure that all disaster critique recommendations enacted.		
6. Identify the regional agency responsible for emergency management and local disaster readiness.	CEO	
a. Identify MMRS POC and phone number if in MMRS city.	CEO	
b. Identify responsible government agency POC and phone number if not in MMRS city.	CEO	
7. CEO should discuss hospital and regional planning with POC of responsible agency (MMRS or other).	CEO	
a. Suggestions for enhanced hospital participation obtained.	CEO	
b. Suggestions for enhanced hospital participation have been enacted by the hospital.		
8. Assign hospital staff members to regional planning committee(s).	CEO	
a. Ensure hospital staff members regularly attend regional planning meetings.		
b. Ensure regional planning representative(s) provide a report to the hospital after each meeting.		

d. Ensure regional recommended training for hospital staff has been provided.		
e. Ensure regional recommended supplies and equipment for hospital has been obtained.		
9. Implement the HEICS framework for incident command and ensure staff is trained in HEICS role.		
10. Ensure participation by the hospital in local or state syndromic surveillance.		
11. Develop systems for reporting bed availability within your region.		
12. Work with regional planners to develop a centralized patient locator system.		
13. Develop primary and back-up communication systems for communicating with other agencies.		
14. Ensure formal, written mutual aid agreements are in place and address transfer of patients, sharing staff including licensure and competence information, and sharing supplies equipment and pharmaceuticals.	CEO	
a. With other area Texas hospitals/facilities.		
b. With other local hospitals/facilities		
15. Ensure callback lists are current.		
16. Ensure hospital staff members' volunteer/military obligations are known.		
17. Ensure medical staff members' volunteer/military obligations are known.		
18. Ensure medical staff members' plans for primary hospital response during a disaster are known.		
19. Ensure hospital and medical staff members' plans for sheltering family embers within the hospital are known.		
20. Ensure a disaster credentialing mechanism is in place for licensed independent practitioners (LIPs).		
21. Ensure a mechanism is in place to verify licensure and competence for non-LIPs during a disaster.		
22. A mechanism to monitor allocation of government funding should be developed and enacted.		

Informational sources

- GNYHA *Emergency Preparedness Communication Options*
- ASTDHPPHE *Model: Emergency Response Communications Plan For Infectious Disease Outbreaks and Bioterrorist Events*

Appendix

Appendix A: Network Activities
Appendix B*: Emergency Public Information Dissemination Worksheets
Appendix C*: Information Dissemination Worksheets for Special Needs Groups
Appendix D*: Hospital Capacity
Appendix E*: Hospital Status & Location
Appendix F*: Key Players in Infectious Disease Outbreak Management
Appendix G*: Emergency Preparedness Communication Options

*Update contact information monthly and date each version

Appendix A: Network Activities that may be considered:

1. Develop firewall capabilities and Web technology and expertise to implement and maintain an ebXML-compliant SOAP service for the secure exchange of information over the Internet.
2. Develop systems and databases to implement the specifications, vocabularies, and standards to exchange like data with public health partners.
3. Implement message parsing technology to allow for the creation and processing of public health information messages.
4. Participate in national stakeholders meetings, data modeling activities, and joint application development sessions to help specific' the data types that will be exchanged among public health partners and to understand how to implement them.
5. Ensure the ongoing protection and security of critical data and information systems and capabilities for continuity of operations. If necessary, develop a proposal for improvements as soon as possible.
6. Assess the existing capacity regarding policies and procedures for protecting and granting access to secure systems for the management of secure information, system backups, and systems redundancy.
7. Perform regular independent validation and verification of Internet security, vulnerability assessment, and security and continuity of operations practices, and rapidly implement recommended remedial activities.
8. Establish a firewall for the protection of critical information resources from the Internet.
9. Implement Public Key Encryption (PKII) or equivalent methods of strong authentication for remote access from the Internet.
10. Develop role-based authorization technology and processes to ensure selective authorization to information resources.
11. Institute server- and client-based virus checking software to protect critical systems
12. Contract with an independent IT security firm to perform ongoing penetration testing and vulnerability analysis.
13. Integrate all remote access to IT resources using commercial, off-the-shelf products for a single method of authentication.
14. Provide critical operational support functions with less than 24-hour alternate site provision.
15. Implement software and/or systems to support critical activities with appropriate redundancy, systems monitoring, and/or systems fail over to provide secure and continuous access to critical IT services.

Appendix B*: Emergency public information dissemination worksheets

TV Stations	Broadcast Language	Hours of Operation/	Area of Coverage	Contact Person	Phone Number/ Email/Fax

Appendix B*: Emergency public information dissemination worksheets (con't)

Cable Stations	Broadcast Language	Hours of Operation	Area of Coverage	Contact Person	Phone Number/ Email/Fax

Appendix B*: Emergency public information dissemination worksheets (con't)

Radio Stations	Broadcast Language	Hours of Operation	Area of Coverage	Contact Person	Phone Number/ Email/Fax

Appendix B*: Emergency public information dissemination worksheets (con't)

Newspapers	Print Language	Deadline	Area of Coverage	Contact Person	Phone Number/ Email/Fax

Appendix B*: emergency public information dissemination worksheets (con't)

Web Site/Sponsor	URL	Language	Contact Person	Phone Number/ Email/Fax

Appendix C*: Information dissemination worksheets for Special Needs Groups

Regional or Group	*Spanish/Hispanic*	*Chinese*	*Indian*	*Hearing impaired*
TV Stations				
Radio Stations				
Cable Channels				
Newspapers				
Web Sites				

Appendix D*

COORDINATED REGIONAL PLANNING
Hospital Capacity

ORGANIZATION	***CITY/ COUNTY***	***CONTACT PERSON***	***E-MAIL***	***PHONE/CELL/PAGER***	***FAX***	***HOSPITAL CAPACITY***

Appendix E*

HOSPITAL STATUS & LOCATION

NAME / STATUS / POC	ADDRESS / PHONE
Name: Status: POC:	Street: City/Zip: Phone:
Name: Status: POC:	Street: City/Zip: Phone:
Name: Status: POC:	Street: City/Zip: Phone:
Name: Status: POC:	Street: City/Zip: Phone:
Name: Status: POC:	Street: City/Zip: Phone:

Appendix F*

Key Players in Infectious Disease Outbreak Management

(Disease Investigation/Risk Communication)

Note: Not all players may be involved in all emergencies.

Local Players:

- First Responders (fire/police/EMS)
- Hospital and Reference Laboratories
- Local Health Department Officials
- Local School Officials
- Local Media Organizations
- Elected Officials (political)
- Public Information System

Federal Players:

CDC, USDA, FDA, NIH

State Players:

- SHD Health Officer/Director
- SHD Public Information Officer
- SHD Laboratory Director
- SHD Epidemiologist
- SHD Environmental Health Official
- SHD Emergency Medical Services Agency
- District/Regional Health Officers
- Department of Agriculture
- State Education Official
- Elected Officials (political)
- State Press Office

Consequence Management (Care/Rescue)

- First Responders (fire/police/EMS)
- Public Utilities
- Local Emergency Management Agency
- State Emergency Management Agency
- SHD Emergency Response Coordinator
- Federal Emergency Management Agency
- Office of Emergency Preparedness
- WMD Civilian Support Teams
- Joint Task Force–Civil Support
- Elected Officials
- Voluntary Organizations Active During Disasters

Crisis Management

(Law Enforcement/Criminal Investigation)

Local Law Enforcement Agencies
State Law Enforcement Agencies
Federal Bureau of Investigation (FBI)

Other agencies called upon by FBI
(may include ATF, Dept. of Justice, etc.)

Appendix G*

Name of facility

Emergency Management Plan

Name of Facility Approval and Implementation

This plan is hereby approved for implementation and supercedes all previous editions.

_____ _____

Facility Administrator Date

Record of Changes

Change Number and Date	Date of Entry	Signature

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Emergency Management Plan

AUTHORITY

This plan was developed in accordance with Health and Safety Code _____, 40 TAC Chapter _____ and in accordance with each facility's existing plans, mandates and standard operating procedures.

PURPOSE

A. The purpose of this plan is to provide general guidelines for mitigation of and response to natural and manmade biological agents (see attachment 1) that endanger the residents and staff of ***name of facility***. Specific guidelines, procedures and instructions are contained in facility plans and standard operating procedures.

B. This plan describes how ***name of facility*** mitigates, prepares for, responds to and recovers from the effects of an emergency or disaster[1]. It also addresses services and resources that can be, may be or cannot be provided in certain situations.

C. This plan outlines methods for assisting the residents and staff of ***name of facility*** to mitigate and deal with the effects of disasters.

D. This document identifies ***name of facility's*** resources in one of three categories.

1. Resources that are dedicated for use by the agency and not available to other facilities.

2. Resources that may or will be available to other facilities.

3. Resources that might be needed that are not readily available within the facility (projected unmet needs).

SCOPE

This plan is applicable in all biological emergency situations affecting the residents and staff of ***name of facility***.

[1] The terms emergency and disaster are interchangeable for the purpose of this document

SITUATION AND ASSUMPTIONS

A. SITUATION

1. ***Name of facility*** is located in the city of _____ in _____ County. The city/county has experienced a variety of emergencies and disasters. An analysis of emergencies and disasters that have the potential to affect this facility is located in attachment 1 to this document.

2. Residents and staff of ***name of facility*** are at risk from hazards that have the potential for causing extensive loss of life, and damage to property and the environment. Additionally, some disasters increase the likelihood of and potential for a number of health and medical issues.

3. Prolonged or catastrophic biological events cause widespread disruption of day-to-day life and have an adverse impact on those affected by these events.

4. ***Name of facility*** has no ability to control conditions. However, the facility must be prepared to address and provide comprehensive information on how biological disasters directly impact residents and staff and be able to ensure immediate action on behalf of those most severely affected.

B. ASSUMPTIONS

1. ***Name of facility*** will implement appropriate and prudent agency plans and procedures when threatened by potential or actual disasters.

2. During emergencies, residents of *name of agency* may experience numerous health problems. Many of these problems are attributable to pre-existing medical conditions complicated by the emergency. Other problems arise as a direct result of the event.

3. The increased number of residents (and staff) needing medical help may burden the health and medical infrastructure. This increase in demand may require city, county and/or state-level assistance.

4. A catastrophic event may cause such widespread damage that the existing internal response capability is curtailed or destroyed.

5. Lack of potable water will increase health and sanitation problems. Disease outbreaks can spread quickly, especially among the medically fragile and other at-risk populations.

6. Proper sanitation may become a major problem if water supplies are gone or contaminated. Water treatment and wastewater treatment facilities may be hampered by any reduced water flow. Wells may become contaminated with silt and bacteria. Private sewage systems will not function properly.

Some disasters may affect electrical generation and distribution systems, causing a reduction or loss of power. This may reduce or disable our agency's ability to provide emergency life-saving services to our residents.

7. During some emergencies, it may be necessary to evacuate residents and staff from the affected area. Adequate medical mass transportation and/or shelter may not be available.

V. CONCEPT OF OPERATIONS

A. BACKGROUND

1. The concept of operations outlined in this plan presumes a severe, prolonged emergency is occurring or is imminent. Implementation of procedures will begin as soon as practical after the event is predicted or occurs. Mitigation efforts will be practiced on a year-round basis with emphasis on awareness and local preparedness. Staff involvement in planning, training and exercising is essential.

2. Staff efforts in awareness, alerts and notification, preventive measures and local responses are critical aspects of the overall strategy. Efforts will be made to foster individual involvement and to promote the idea of **"neighbors helping neighbors"** within the facility. Effective facility-wide participation by administration, health and medical professionals, other staff, volunteers, outside health and medical providers and city/county emergency management must be cultivated and sustained to ensure maximum protection of the residents and staff.

3. Mitigation and response actions will vary according to the specific conditions. Generally, these actions will follow a phase-in process based on the type of emergency. Four **recommended** readiness levels **may** be implemented as follows (Also refer to the facility procedure manual for additional information).

B. Readiness Levels

Level 4 - Normal conditions. During normal conditions, primary emphasis will focus on awareness and readiness (planning, information, training and exercising). The administration will provide emergency education and information to the staff. In addition, staff should complete training that is germane to applicable response activities. It is also strongly recommended the facility conduct at least one annual exercise that includes testing disaster response.

Level 3 - Increased readiness. When a disaster is foreseen, such as severe weather, activities will focus on warning people who will be potentially endangered. ***Name of facility*** will encourage staff to emphasize **"neighbors helping neighbors"** efforts. Appropriate mitigation and preparedness actions should be initiated during this level.

Level 2 – High Readiness. When an emergency is imminent, all applicable protective action plans and procedures should be activated. This includes implementing alert and notification procedures throughout the agency. A network should be in place for reporting on-going events and assessing current factors and resources.

Level 1 – Maximum Readiness. During an actual occurrence, ***name of facility*** will implement actions to accomplish task assignments in accordance with applicable operational procedures. If the scope of the emergency expands to the point that all internal response assets have been committed, the applicable agency will be contacted (in the order provided) to request assistance.

1. Local fire, police or other applicable agency
2. The city of _____ Emergency Management Coordinator.
3. The county of _____ Emergency Management Coordinator.
4. The nearest Texas Department of Public Safety facility or trooper (if you cannot contact one of the above).

VI. ORGANIZATIONAL INFORMATION, CAPABILITIES AND RESOURCES

A. MISSION STATEMENT

Examples of appropriate mission statements are located in the accompanying guidance document.

B. FUNCTIONAL ELEMENTS

Examples of the following functional elements are located in the accompanying guidance document.

1. Direction and Control
2. Warning
3. Communications
4. Shelter/Mass Care
5. Evacuation
6. Transportation
7. Health and Medical
8. Resource Management

VII. DEVELOPMENT AND MAINTENANCE

A. DEVELOPMENT

1. This plan is designed to identify a range of actions to be taken to support ***name of facility*** and coordinate assistance to residents and staff when events present an increase in demand for health and medical services. It provides general guidance for effectively managing response activities before, during and following the event. It identifies health and medical resources that may or may not be available.

2. This plan is based on certain assumptions and the existence of specific resources and capabilities that are subject to change. A great deal of flexibility is built into this plan. Some variations in the implementation of the concepts identified in this plan may be necessary to protect the health and safety of residents and staff.

B. MAINTENANCE

Name of facility *will review and, if necessary, update this plan at least once per year. Revisions will reflect changes in procedures, improved methods, changes in availability of resources and corrections of any deficiencies or omission.*

This plan was coordinated with the applicable Emergency Management Coordinator per applicable regulations. A copy of this plan is on file in the Coordinator's office.

ATTACHMENTS

Attachment 1 – *Name of Facility* Hazard Analysis

Community			Facility			
Hazard	Frequency	Potential Magnitude	Severity	Warning Time	Special Planning Considerations	Priority

Attachment 2 – *Name of Facility* Resources and Unmet Needs

The following resource management chart identifies the current *name of facility* resource situation

Resource	Status*	Comments
Beds and linens		
Non-essential medical supplies		
Emergency medical transportation		
Fuel		
Communications equipment		
Vaccinations & inoculations		
Fans & heaters		
Wheelchairs		
Personnel		
Oxygen		
Drugs		
Food & water		
Blood & blood products		
Portable generators		

- Y – Sufficient resource on hand for at least 72 hours after disaster … S – Resource on hand and will share if not needed
- M – Resource on hand and may share depending on situation … U – Unmet need; depending on other sources for supply

Attachment 3 – *Name of Facility* Support Agency Phone Numbers

Agency Name	Phone	Fax	Email

Attachment 4 – *Name of Facility* Procedures

Medical Operations

Purpose: This guidance document is intended to provide a summary and recommendations for how a hospital can most effectively plan for the maintenance and augmentation of medical operations services relative to operating the hospital in the event of a biological incident.

Staff: The hospital's Chief of Staff, Chief of Nursing and the administrators to whom they report.

Recommendations: The goal of any hospital is expert patient care – this goal becomes even more challenging during a major disaster. Protocols, guidelines, and training provide the structure for clinical staff to achieve that goal. To effectively maintain the hospital's day-to-day medical operations and augment its capacity during a biological incident it is imperative that the hospital facility and its staff properly prepare.

Guidance

I. Staffing, Credentialing, Insurance

A. Plans for staffing during a disaster
   1. Ensure that callback lists are current
   2. Review plans for providing shelter and support for hospital and medical staff members' family if needed.
   3. Evaluate how many hospital staff members and medical staff members are also members of volunteer disaster response organizations.
   4. It may be critical for staff to work in other hospitals or other types of healthcare facilities during a disaster.

B. Emergency Staff Privileges
   1. During a disaster in which the emergency management plan has been activated, the chief executive officer or medical staff president of the hospital or his or her designee(s) has the option to grant emergency privileges.

C. Consider the exchange of credentialing and staff competence paperwork before disaster strikes so that staff can readily shift to another pre-established site of care if needed. The local medical society can play an important role in developing a mechanism to facilitate a process of access and privileges between facilities.

D. The individual(s) responsible for granting emergency privileges should be identified, along with contingencies for alternates should the need arise. The responsible individual(s) is not required to grant privileges to any individual and is expected to make such decisions on a case-by-case basis at his or her discretion.

E. The chief executive officer or president of the medical staff or his or her designee(s) may grant emergency privileges upon presentation of any of the following:
   1. A current picture hospital ID card.
   2. A current license to practice and a valid picture ID issued by a state, federal or regulatory agency.
   3. Identification indicating that the individual is a member of a Disaster Medical Assistance Team (DMAT).
   4. Identification indicating that the individual has been granted authority to render patient care in emergency circumstances. Such authority having been granted by a federal, state or municipal entity.
   5. Presentation by current hospital or medical staff member(s) with personal knowledge regarding practitioner's identity.

F. Memorandum of Understanding (MOU)
   1. During the time of a community-wide disaster, hospitals may need to rely on a MOU with other hospitals or healthcare facilities to facilitate:
      a. Transfer patients to the most appropriate facility to provide care
      b. Access to back-up supplies, equipment or pharmaceuticals

c. Staffing assistance.

2. Ensure that the MOUs have been developed before disaster strikes.
3. Ensure that all agreements are in writing and that the community plan and the hospital's plan include the details of how these agreements would be operationalized.

II. Laboratory Support

A. There is a national laboratory response newwork (LRN) in place for diagnostic laboratories. In Texas, there are a number of local level B or C laboratories who function as a regional laboratory coordinating all level A labs in their region. TDH can provide your hospital with your regional lab contact information. There is a national proposal that laboratories be grouped according to their ability to support the diagnostic needs associated with a bioterrorist event.
   1. Level A: This level consists of hospital laboratories, clinical laboratories, and most small health department labs. The role of the level-A laboratory is to conduct initial procedures to rule out ciritical biological agents and refer samples to their Level B regional lab.
   2. Level B: Consists of city, county or small state laboratories with special diagnostic testing capability. The role of the level B laboratory is to provide the first level of agent confirmation and transportation to the next level.
   3. Level C: Large state health department laboratories and other labs with advanced testing capabilities such as molecular technology. Level-C laboratories provide agent confirmation and reference- Laboratory capabilities.
   4. Level D: Centers of Disease Control (CDC) or select Department of Defense laboratories such as the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). These laboratories provide the highest level of agent characterization, and conduct research and development on laboratory methods for enhanced bioterrorism agent identification.

B. Most hospital clinical laboratories are not equipped to identify bioterrorist pathogens. These laboratories will primarily be responsible for collection, packaging, and transportation of specimens to the county or state laboratories.
   1. In conjunction with the regional laboratory, each hospital laboratory should develop specific policies and procedures for collection, packaging, and transporting specimens to the next level of expertise.
   2. Infection control practitioners should contact their regional laboratory for instructions on collection, packaging and transporting specimens to the next level laboratory.
   3. Laboratories collection of blood specimens for serology testing should retain an aliquot to accommodate lost specimens. The retained blood specimens should be kept in a secure locked cabinet.
   4. During a bioterrorist event, laboratory personnel should take maximum precautions when handling specimens. Laboratory personnel should wear appropriate personal protective equipment (PPE) when handling all clinical specimens.

III. Training/Education

A. To effect the best integration with existing hospital procedures, it is recommended that hospitals add a bio-terrorism section to their current disaster plans. For the purpose of training and education the following elements should be incorporated to that existing plan:

1. Clinician training – this should include education sufficient to ensure that all clinical staff learn to recognize and report possible cases of uncommon infectious diseases or cases caused by an introduced biological agent.
2. Provider community – Many of the outbreaks of atypical infectious diseases have been seen initially in physician offices and community health centers. Hospitals should provide educational outreach activities that include local and regional provider offices so that early intervention, investigation, identification, and containment are possible across the community.
3. Ancillary staff training – While universal precautions are observed in hospital settings, it is important to train any front-line personnel that will directly care for patients and/or process specimens about the need for increased diligence given the heightened threat. This training should include increased emphasis on the proper use of personal protective equipment (PPE), how to respond to and contain suspected victims, how to decontaminate following any suspected exposure, and how to properly report any suspected outbreak.
4. Neighboring communities – Diseases do not stop spreading when they encounter property boundaries including international borders. Texas hospitals along the Mexico border should consider coordinating bi-national seminars to ensure that both countries are effectively preparing for biological incidents.
5. Public forums – Hospitals can provide a valuable resource to allay the public's fear and increased need for information by hosting community forums and having medical personnel knowledgeable about infectious diseases present to provide tips about how to limit exposure and recognize any unusual symptoms at the earliest possible point.
6. Reference materials – Hospitals should organize and maintain related reference material, including treatment protocols, where they can be easily accessed. Each hospital system should ensure that the administrator-on-call and lead medical staff knows where these are kept so that they can be used when needed. This material should include access to appropriate and pre-identified computer-based web sites.
7. Patient management systems – It should be determined what systems are available in your community and how they can be deployed and supported from areas not involved directly in the attack.
8. Your local health department, or area MMRS City may have been funded to coordinate training for their city or regional area and can provide or facilitate some training for hospitals and other health and medical entities at low or no cost.

B. To ensure that education and training are effective, drills and exercises should be conducted periodically to assess the hospital's level of preparedness. Hospitals should participate in city, county, and/or state drills if available. Drill responses should be evaluated to make any plan corrections if needed.

IV. Communication

While the need for communication is woven throughout this planning guide, hospitals can organize their communication strategies using the following steps: (see Appendix C: Chain of Command)

A. Internal Communications
   1. Educate employees and non-employees who frequent the medical center to recognize and respond to bio-terrorism events. For most hospitals this will include employees, both clinical and non-clinical, physicians and other providers, all types of students, volunteers, and vendors.
   2. At the earliest possible juncture following suspected exposure, the hospital's emergency management procedures should be activated to include a command center able to control any incident and use the chain-of-command as defined.
   3. Prepare a communication plan for coordination among key hospital departments that is ready to be activated in the event of any exposure. This should include any potential for locking down the hospital and diverting further admissions to minimize exposure to personnel, patients, and visitors.

B. External Communications
   1. The hospital command center should be prepared to act as a clearinghouse for notification of external agencies. Steps to be taken should include:
      a) Providing initial notification to the local health department.
      b) Estimating the number of victims and potential spread as early as possible.
      c) Communicating with your local public health authority, TDH and/or local office of emergency management, if appropriate to begin to mobilize a broader response.
      d) Working through established plans within your region coordinate all information related to the incident.
   2. Formally establish a chain-of-notification and request for assistance to include:
      a) Local health care resources
      b) Local Public Health
      c) Local Emergency Management Office
   3. If the incident command is activated, public comments should be coordinated through the incident command Public Information Officer.

V. Post-mortem care

Pathology departments and clinical laboratories must be informed of a potentially infectious outbreak prior to submitting any specimens for examination or disposal. All autopsies will be performed carefully using all personal protective equipment and standards of practice in accordance with Standard Precautions; including the use of masks and eye protection whenever the generation of aerosols or splatter of body fluids is anticipated.

VI. Mental Health Services

A. Any mass casualty incident will place a profound amount of stress and grief on responders, victims, families and the community as a whole. An act of bioterrorism heightens this stress, which may manifest itself in anger, fear, anxiety accompanied by both mental and physiological symptoms. The mental health of the community needs to be addressed both in the short and long term before a true return to normal can be accomplished.

B. In addition to accessing your hospital's mental health capabilities, determine which agencies in your community are responsible for responding to mental health needs. The following services should be provided:
   1. Coordination with other local, state, and federal mental health care providers to ensure a community wide mental health care program is in place following an incident.
   2. Individuals with Red Cross Disaster Service Training, who will, in a non-intrusive manner, provide supportive activities for survivors, family members and other support personnel.
   3. Coordination of the clergy response for those in need to ensure religious support is available.
   4. Mental health services for responders, victims and their families

VII. Confidentiality

A. It is necessary to develop guidelines for maintaining the confidentiality of victims/patients and hospital data in the event of a bio-terrorism incident that could involve mass casualties. These guidelines are general and each facility will need to establish specific policies to be compliant with state and federal standards Health Insurance Portability and Accountability Act (HIPPA).

B. Ideally, electronic medical records would eliminate a paper trail. However, this may not be an option for many facilities. Therefore:
   1. Medical Records department should establish a medical record for each patient.
   2. The Medical Record should remain with the patient at all times until such time he/she is admitted as an inpatient and hospital standards for the inpatient Medical Record would be ongoing.
   3. Communication of information regarding patient information to the public should be released only from an appointed hospital representative.
   4. The Medical Records department should only release patient information after appropriate consent is obtained. In the event of an emergency transfer the rules related to EMTALA (Emergency Medical Treatment and Active Labor Law) prevail in the best interest of the patient.
   5. All entities responding to the incident should sign confidentiality statements and only the Medical Records department should be authorized to release this patient information.

6. All responders should have identification badges with name and specific role/professional status (RN, Dr., Security, etc.) This is in effort to reduce the opportunity of breach by other than officially recognized responders.
7. Any faxed patient information should include a cover page with a confidentiality statement and only released by Medical Records department.

VIII. Documentation

A. Develop guidelines for the Healthcare Worker to document the continuance of medical care/treatment given to a victim of bioterrorism.
   1. The record should have clearly marked divisions for each department for documentation purposes.
   2. Recommend use of standardized forms to eliminate confusion.
   3. Use only standard abbreviations, (IF abbreviations must be used. It is better to spell out medications, dosage, treatments, etc.).
   4. Document what PPE will be used with the victim.
   5. Document type of equipment utilized.
   6. Document medical status of patient with diagnosis.

Summary:

At the end of this planning process, your plan should address:

Critical to the success of the hospital's emergency management plan in responding to a biological event is the hospitals ability to:

1. Access sufficient numbers of physicians and staff
2. Preserve patient confidentiality
3. Maintain and augment medical operations services
4. Describe the method for maintaining an active list of personnel that are credentialed for a facility.
5. Describe the method for credentialing staff from other hospitals and other portions of the state.
6. Describe the method that will be used to test the personnel/staffing component of the regional plan.
7. Describe the staff training that is needed for a coordinated regional response.
8. Describe the plan to regularly test the personnel readiness portion of the regional plan.
9. Prepare personnel in advance with multiple scenarios.

Action Items:

Actions	Assigned To	Completion Date
1. Identify in writing the individual(s) responsible for granting emergency privileges.		
2. Describe in writing the responsibilities of the individual(s) responsible for granting emergency privileges.		
3. Describe in writing a mechanism to manage the activities of individuals who receive emergency privileges. Create a mechanism to allow staff to readily identify these individuals.		
4. Address the verification process as a high priority. Create a mechanism to ensure that the verification process of the credentials and privileges of individuals who receive emergency privileges begins as soon as the immediate situation is under control. This privilege process is identical to the process established under the medical staff bylaws for granting temporary privileges to fulfill an important patient care need.		
5. Continuous training and education material should be provided to staff members regarding responses to a bioterror attack.		
6. Ensure that MOU's have been developed before disaster strikes.		
7. Determine which agencies in your community are responsible for responding to mental health needs.		
8. Describe post mortem care procedures when dealing with infection control.		
9. Develop guidelines for maintaining the confidentiality of victims/patients and hospital data in the event of a bio-terrorism incident that could involve mass casualties.		

Web Sites Specific to Medical Operations:

Texas Department of Mental Health and Mental Retardation (TDMHMR) Disaster Services:
http://www.mhmr.state.tx.us/CentralOffice/MedicalDirector/DAPdisastersvcs.html

Texas Department of Mental Health and Mental Retardation – Disaster Matrix
http://www.mhmr.state.tx.us/CentralOffice/MedicalDirector/DAPmatrix.html

TDMHMR - Disaster Mental Health Plan: The Disaster Assistance and Crisis Response Services Program – Disaster and Terrorism Mental Health Response and Recovery Plan
http://www.mhmr.state.tx.us/CentralOffice/MedicalDirector/DmHplan.html

Appendix:

Appendix A: Sample Hospital Memorandum of Understanding
Appendix B: Sample Hospital Chain of Command
Appendix C: Medical Record Review Form

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Appendix A

Mutual Aid Memorandum of Understanding

Letter of Agreement

This Memorandum of Understanding shall; become effective on _____, and shall continue in effect indefinitely, except that a Participant may terminate its participation in the Memorandum of Understanding by giving a sixty (60) day written notice to the other Participants of its intentions.

This Memorandum of Understanding shall be reviewed periodically. It may be amended upon agreement of a two-thirds majority of then current Participants

This Agreement is in no way meant to affect any of the Participants' rights, privileges, titles, claims, or defenses provided under federal or state law.

_____

Health Care Institution

_____

CEO/COO

_____

Date

Appendix B

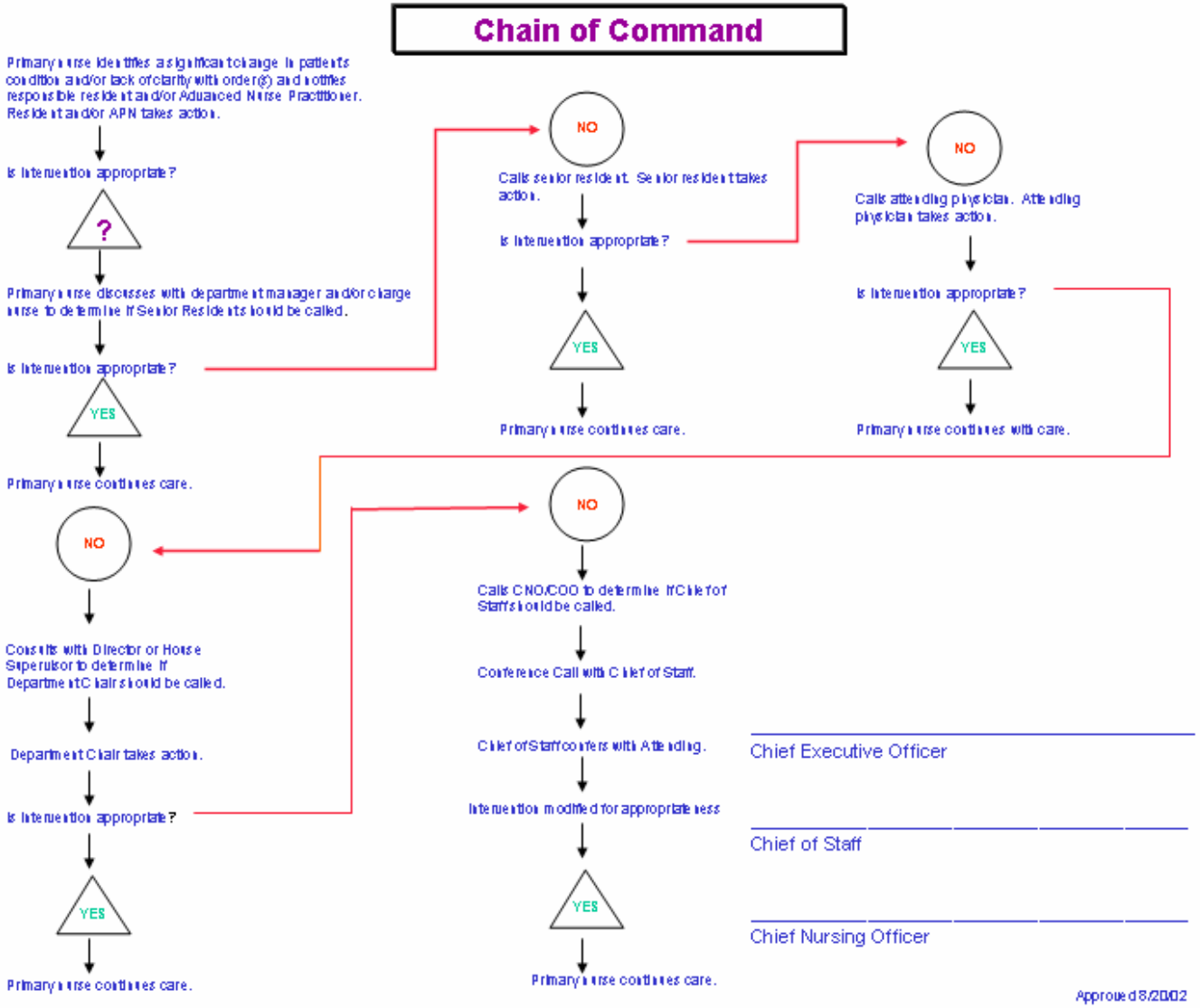
MEDICAL RECORD REVIEW FORM

Actions:

- ☐ Record age, name and medical number
- ☐ Record fever at time of admission
- ☐ Check the number (1, 2 and/or 3) in the appropriate columns corresponding to the sign or symptom
- ☐ If patient returned from a foreign country within the past 3 weeks, identify country
- ☐ If patient was exposed to rodents, insects or animals within the past 3 weeks, identify potential place of exposure (camping, home yard, etc.) and potential source of exposure (ticks, fleas, domestic or exotic animals)
- ☐ If patient has any of the following, call the local health department immediately:
  Chest x-ray suspicious for anthrax, e.g. widening mediastinum
  Rash suspicious for smallpox, or
  Bloody sputum suspicious for pneumonic plague

AGE	Name	Medical Record #	Fever at time of admit	Cough=1 Sore throat=2 Pneumonia=3			Rash 1=Yes	Shock 1=Shock 2=Sepsis 3=Bleeding			Death 1=Yes	Nausea=1 Vomit=2 and/or Diarrhea=3			Comments 1=Travel to foreign country in past 3 weeks (identify country) 2=insect, rodent, animal exposure & source of exposure (identify)	
				1	2	3	1	1	2	3	1	1	2	3	1 (identify)	2 (identify)

Appendix C


Chain of Command
Primary nurse identifies a significant change in patient's condition and/or lack of clarity with order(s) and notifies responsible resident and/or Advanced Nurse Practitioner. Resident and/or APN takes action.
Is intervention appropriate?
?
Primary nurse discusses with department manager and/or charge nurse to determine if Senior Resident should be called.
Is intervention appropriate?
YES
Primary nurse continues care.
NO
Calls senior resident. Senior resident takes action.
Is intervention appropriate?
YES
Primary nurse continues care.
NO
Calls attending physician. Attending physician takes action.
Is intervention appropriate?
YES
Primary nurse continues with care.
NO
Consults with Director or House Supervisor to determine if Department Chair should be called.
Department Chair takes action.
Is intervention appropriate?
YES
Primary nurse continues care.
NO
Calls CNO/COO to determine if Chief of Staff should be called.
Conference Call with Chief of Staff.
Chief of Staff confers with Attending.
Intervention modified for appropriateness
YES
Primary nurse continues care.
Chief Executive Officer
Chief of Staff
Chief Nursing Officer
Approved 8/2002

Security

Purpose: This guidance document is intended to provide a summary and recommendations as to how hospital staff can effectively plan for security services to protect the hospital in the event of a civil disturbance associated with a biological event.

Staff: The hospital manager directly responsible for hospital security services and the administrator to whom he or she reports.

Recommendations: To protect the hospital's staff members, patients, visitors and physical plant all acute care hospitals should have security plans to address the need for extra security precautions and security staff coverage during a threatened or actual biological event.

An incident involving mass release of a biological agent has a high potential to result in public panic and may threaten the security of the hospital. Security precautions and planning should address everything from day-to-day awareness to procedures during an actual event. Security during an event will be critical in maintaining the operating integrity of the hospital, protection from unauthorized entry and contamination and actual threat against the hospital. Planning for the security of a facility must include resources outside the facility. By integrating hospital security planning into the local/regional emergency management planning process, resources can be coordinated and effective security provided within the local incident command system.

Guidance

When developing the security plan of an acute care hospital the following questions and comments should be considered. Responsibilities for providing security (Appendix A) are provided as a reference but will need to be expanded to fit each acute care facility's capabilities. Integration into the local/regional planning is also important when considering resources and procedures to handle large numbers of patients presenting to a facility during a time of disaster.

I. Security Staffing

A. Concerns and consideration for staffing security during an emergency incident will vary depending on the specific characteristics of the incident.

B. As a plan is developed for a biological attack, special consideration for staffing may require reliance from outside resources.

C. All available personnel within the immediate area may already be overcome by the attack, or already providing security at the scene.

D. Without prior planning, law enforcement, fire fighters, Emergency Medical Service (EMS), and emergency management will most likely not be prepared to assist during the immediate stages of an incident.

E. Hospitals must be part of the local/regional disaster preparedness planning process and work together to identify resources that can be mobilized in case of an event.

F. A Memorandum of Understanding (MOU) between hospitals and other health care facilities within a community is recommended.

G. The appropriate number of security personnel needed to properly staff a hospital in the event of a biological release is dependent upon the size and accessibility to the facility, and the volume of potential persons arriving at the hospital.

II. Security's Role In Maintaining Isolation

A. Security's role in isolation needs to remain consistent with the responsibilities outlined by all applicable regulatory agencies.
   1. The responsibilities of the Hospital Security Department include:
      a) Providing building access control.
      b) The assignment and training of security staff.
      c) Maintaining and regulating traffic control.
      d) Providing a secure environment for hospital staff, patients, visitors, and property assets.

B. In an isolation area, the role of security should not change.
   1. In addition to the standard responsibilities for Security, Personal Protective Equipment (PPE) may need to be worn and it may be necessary to collect and secure crime evidence.
   2. During the planning process, be sure to address how the responsibilities of the Security personnel will be performed while wearing PPE.
   3. Review any procedures associated with the collection of crime evidence.
   4. During the local/regional planning process, these issues should be addressed by law enforcement participants and incorporated into the community response plan.

III. Handling of the Media

A. In addition to routine security responsibilities during an incident, media will need to be identified and isolated from patients, family members, and staff.

B. Identify and secure a specific location for the media, separate from the Emergency Operations Center.

C. Any information with regards to the operations of the incident, persons involved, and care provided will need to be routed through the public information officer at the hospital level, the local level or the state level depending upon the size of the incident.

D. Procedures and possible scripting needs to be developed and used when trying to control rumors and in talking to the media.

E. Coordinating information released to the media with local government is critical to ensure accuracy.

IV. Crowd Control

A. Security's function in crowd control centers on communications to promote an orderly area.

B. Graphics provide direction of flow for victims, visitors, media, volunteers, ambulance, etc.

C. Vehicles or barricades may be needed to control both traffic and crowd congestion.

D. People will be responding to the hospital seeking information about where to report to be a volunteer, how to find about a patient/family member, or where to take supplies etc.

E. The more information that is provided through graphics or direct contact with security personnel the more apt the crowd is to remain calm and work with the facility.

V. Lock Down/Access Control

A. The following should be implemented in response to a potential threat communicated by hospital administration, local and/or federal authorities:
   1. Coordinate plans with local law enforcement agencies.
   2. Limit the number of entry points to facility.
   3. Communicate with local authorities specific security needs of the facility.
   4. Monitor surveillance cameras 24/7 and maintain tape backup.
   5. Strictly enforce physician/employee identification policy.
   6. Focus on crowd control as needed.
   7. Screen visitors to limit access into vital areas, require proper identification.
   8. Half hour rounds of facility to include:
      a. Open entrances
      b. Locked entrances
      c. Nursing wings, and,
      d. Security sensitive areas to include but not limited to air intakes, emergency generators, medical gas parks and fuel tanks.
   9. Report any unusual conditions to the hospital administration and intervene as required.

   10. During the event:
   1. Lock and post a guard or security-trained staff member at each entry point.
   2. Enforce physician/employee identification policy.
   3. Direct all potential patients to appropriate area.
   4. Direct all media to designated location.
   5. Limit access of visitors to vital areas, direct non-essential personnel/visitors to pre-designated area.
   6. Focus on crowd and traffic control.
   7. All deliveries should be directed to material management.
   8. All suspect packages, containers and/or mail should be deemed safe prior to entry to facility.
   9. Video monitor or post a guard/staff member at the following areas until threat has been reduced:
      a) Sensitive area
      b) Air intakes, if at ground level
      c) Emergency generators
      d) Medical gas parks

e) Fuel tanks, and,
f) Other critical equipment areas

10. Report any unusual conditions to the hospital's incident command center and intervene as required.

C. Protection of hospital staff, patients, visitors and property assets from contamination and assistance in crowd control are paramount.
   1. Limiting access to the facility may be done efficiently by securing all exterior doors and placing security officers at access points.
   2. Should sufficient staffing not be available, all exterior access should be locked.
   3. During the initial response adequate security personnel may not be available and designated staff may be assigned to secure the facility.

D. An alternative measure to consider during the planning phase is the utilization of electronic locking and access systems.
   1. Regulatory requirements for fire protection must be followed when utilizing these systems.
   2. An identification system must be established for identifying those who may gain access to the facility without being escorted by authorized personnel. Such a system must provide for different levels of access for all hospital and emergency personnel.
   3. Integration of these measures into the regional disaster preparedness planning is critical in order for outside resources to be familiar with the hospital's security plan and how they will interface with the hospital security measures.

VI. Training/Education

A. Security must have the responsibility of educating anyone entering the facility that is not familiar with protocol, i.e., chaplains, media, visitors etc.
   1. At a minimum, all security staff and or volunteers need training at the awareness level in response to a bio-terrorism incident.
   2. Awareness level training can be obtained at http://www.teexwmdcampus.com/ or a course offered through FEMA (Federal Emergency Management Agency) at http://www.fema.gov/ ("Emergency Response to Terrorism Self Study").

B. In order to have the most effective security and staff, training in biological incidents, communications, and domestic disturbances should be provided.

C. Integrating training with local law enforcement is a good way to promote mutual understanding of procedures and capabilities, and to share information relating to these subjects.

D. Ensure proper training in how to use and wear PPE.

VII. Communications

A. Communications are a vital part of any incident response. Considerations that need to be taken into account during the planning phase are potential loss of communication capabilities, secure communication lines, and communications with the public.
   1. Insufficient and/or incompatible communication capabilities during a crisis will result in jammed phone lines and impaired email systems.
   2. A secure means of communication is an issue when transmitting over airways.
   3. The potential for information to be intercepted and misinterpreted must be a consideration in any form of communication.
   4. Redundancy and back up modes must also be considered.

B. Hospital integration into regional planning processes will allow for recognition of alternate means of communication. Efforts to acquire compatible hardware can be considered in the planning for expenditure of funds supporting bioterrorism response. (see Communications)

VIII.Confidentiality

A. During an emergency incident, patient confidentiality protocols established within the hospital should remain in effect.
   1. The crisis communication plan for each facility should be applied to this particular section.
   2. The confidentiality of information transmitted between the facility and the command center is another critical component. (see Patient Tracking)

Summary:

At the end of this planning process, your plan should address:

1. How hospital security will be provided (crowd control, patient traffic to support triage decisions, prevention of further terrorist attacks at the hospital.
2. The plan to regularly test the physical plant and security components of the regional response plan.
3. The ability to control of the facility and maintain infection control.
4. A system to communicate with the public.
5. The appropriate number of security personnel needed to properly staff your hospital following an event and the identification of those resources.
6. Training of security staff in biological incidents, communications and domestic disturbances.

Action Items:

Actions	Assigned To	Completion Date
1. Ensure that all security personnel, including back-up personnel, have training specific to their role in a disaster.		
a) Include training in handling hazardous materials associated with a biological event.		
b) Include training in the appropriate use of personal protective equipment.		
c) Include training about the hospital disaster plan and specific security procedures to be used during a disaster.		
2. Ensure that there are plans for augmenting the security force with individuals trained in security procedures during a disaster.		
3. Meet with the contract provider of security services, if used, to determine and agree to the level of priority the contractor will give the hospital during a disaster.		
4. Ensure that security staff are trained and have drilled to adequately coordinate with police and other government officials who may have jurisdiction during a disaster.		
a) Training must include information about the government agency command structure and authority.		
b) Training must include a review of the government agency emergency management terminology.		
c) Training must include information about the government agency communication systems.		
5. Ensure that security policies and procedures and emergency management plans address all of the minimum procedures for day-today awareness, heightened alert, and during an event.		

Equipment:

Security Disaster Management Kit:

- Job Action Sheets (include chain of command diagram)
- Color coded vest
- Color coded ID badges
- Color coded marker flags
- Flashlights
- Activities Log
- Writing utensils
- Facility maps (site and building)
- Contact information

Informational sources:
JCAHO Standards: Security Management Plan
MMRS Plan: Section 1.I Protection of Facilities and 1.L Crowd and Perimeter Control

Appendix:
Appendix A*: Sample Security Leader Responsibilities
Appendix B*: Sample Organizational Chart
Appendix C*: Security Contact List

*Update contact information monthly and date each version

Appendix A: Sample Security Leader Responsibilities List

HOSPITAL EMERGENCY INCIDENT COMMAND SYSTEM — SECURITY UNIT LEADER
Job Action Sheet — Revised: 5-02 Reviewed:

SECURITY UNIT LEADER

(Security Supervisor)

Positioned Assigned To: _____ Date: _____ Time: _____

You Report To: _____ (Logistics Section Leader)

Logistics Command Center: _____ Telephone: _____

Mission: Organize and enforce scene/facility protection and traffic security.

Immediate

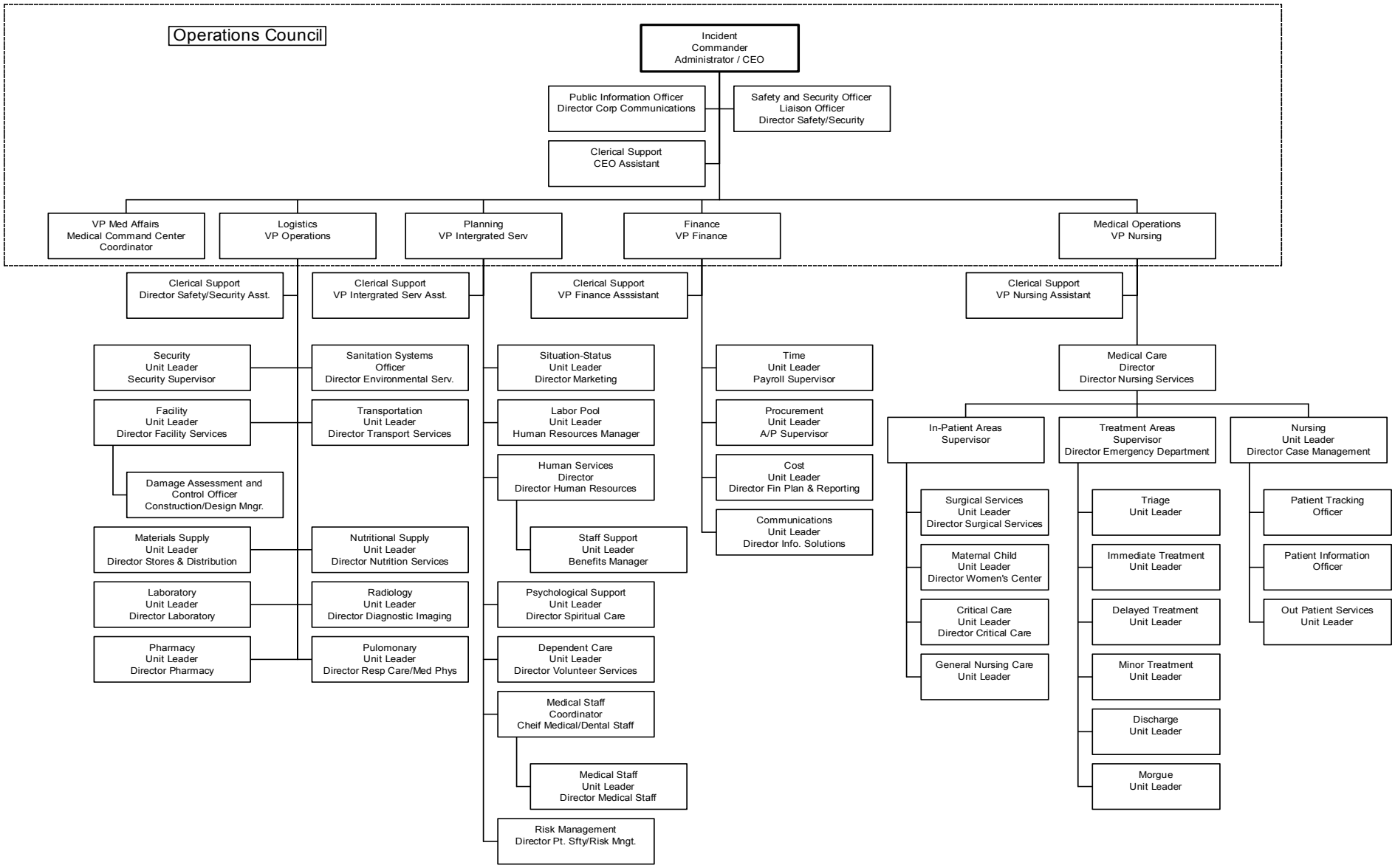
____ Receive appointment from Logistics Section Leader.
____ Read this entire Job Action sheet and review organizational chart (Appendix B).
____ Wear position identification vest.
____ Obtain a briefing from Logistic Section Leader.
____ Implement the facility's disaster plan emergency lockdown policy and personnel identification policy.
____ Establish Security Command Post.
____ Remove unauthorized persons from restricted areas.
____ Establish ambulance entry and exit routes in cooperation with Transportation Unit Leader.
____ Secure the E.O.C., triage, patient care, morgue and other sensitive or strategic areas from unauthorized access.

Intermediate

____ Communicate with Damage Assessment and Control Officer to secure and post non-entry signs around unsafe areas. Keep Security staff alert to identify and report all hazards and unsafe conditions to the Damage Assessment and Control Officer.
____ Secure areas evacuated to and from, to limit unauthorized personnel access.
____ Initiate contact with fire and police agencies through the Liaison Officer, when necessary.
____ Advise the Logistics Section Leader immediately of any unsafe, hazardous or security related conditions.
____ Assist Labor Pool and Medical Staff Unit Leaders with credentialing/screening process of volunteers. Prepare to manage large numbers of potential volunteers.
____ Confer with Public Information Officer to establish areas for media personnel.
____ Establish routine briefings with Logistics Section Leader.
____ Provide vehicular and pedestrian traffic control.
____ Secure food, water, medical, and blood resources.
____ Inform Security staff to document all actions and observations.
____ Establish routine briefings with Security staff.
____ Observe all staff, volunteers and patients for signs of stress and inappropriate behavior. Report concerns to Psychological Support Unit Leader. Provide for staff rest periods and relief.

HOSPITAL EMERGENCY INCIDENT COMMAND SYSTEM

ORGANIZATIONAL CHART CROSSWALK



The positions found on this chart are offered only as suggestions to fill the functional roles found on the HEICS Organization Chart

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Appendix C: Security Contact Sheet

SECURITY CONTACT SHEET

ORGANIZATION	***COUNTY***	***COORDINATOR***	***E-MAIL***	***PHONE***	***CELL/PAGER***	***FAX***

Pharmaceuticals

Purpose: This guidance document is intended to provide guidelines and recommendations for the minimum levels of pharmaceuticals that a hospital should have on hand to provide appropriate treatment to victims of biological agents and to provide prophylaxis for hospital and medical staff members in a disaster situation. The document also addresses the need to plan for regional/state back-up pharmaceuticals and other supplies to be used if a hospital's inventory becomes depleted.

Staff: The hospital's Director of Pharmacy and Materials Management and the administrators to whom they report.

Recommendations: All Texas acute care hospitals should have access to at least a 24 hour supply of pharmaceuticals and other supplies needed for treatment and prophylaxis for patients, victims, hospital medical staff and family members of staff in the event of exposure or potential exposure to a biological agent. In addition, plans should be developed for a 24 to 72 hour re-supply using regional and state stockpiles to provide coverage for the first 72 hours following an event, after which federal stockpiles should be available. Access to the state and federal stockpiles is through the state disaster response system, which starts at the local level. Planning must include integration into the disaster response system and include local emergency management planners in the hospital regional planning process. Integration in the planning process will ensure that steps to activate necessary resources are a part of the hospital and regional response plans.

The pharmaceuticals and supplies needed in a disaster situation involving biological agents may include quantities that significantly exceed the usual PAR levels maintained by a hospital for day-today operations. Back up plans to re-supply some essential drugs and supplies need to be included in the hospital and regional plans. For this particular aspect of planning, it is essential that hospitals collaborate with community/regional emergency management planners to tailor their inventory appropriate to the regional plan and integrate a process to activate the state and federal resources through the disaster response system.

Guidance

One aspect of being prepared for a biological incident is procuring the pharmaceutical agents necessary to treat a large number of exposed victims.

I. On Hand Supplies

A. Facilities should consider the following when determining on-hand quantities of supplies and pharmaceuticals needed in the event of biological-related disasters:
   1. Create a survey to determine the needs assessment in the event of a bioterrorism event and include this in the disaster preparedness planning process
   2. Participate in the local community/regional disaster preparedness and response planning process
   3. Know how many additional patients can be cared for by the facility; how many staff members (both hospital and medical staff) will be involved in response to a disaster
   4. Consider an expansion plan
   5. Know how many staff members (both hospital and medical staff) would need to shelter their family members at the hospital in order to feel comfortable about providing support to the hospital in a disaster
   6. Know what space is available to store the readiness supplies and pharmaceuticals in the facility
   7. Know how the facility ensures that the expiration dates are monitored and stock is rotated
   8. Know how supplies are ordered (i.e. a bulk re-supply process) and maintained in the event of a disaster.

B. Identify facility role in the community/regional disaster preparedness program:
   1. Estimate what the additional patient intake will be in the event of a biological incident.
   2. Many factors will influence this estimate, including the proximity of other facilities and the relationship between the facilities.

C. Recommendations
   1. Each facility should maintain at least a 24 hour supply of the suggested supplies/equipment and pharmaceuticals or
   2. Have immediate access to these supplies through a local disaster preparedness program as well as additional supplies to be able to provide a 72 hour supply
   3. The following formula will be helpful in estimating the quantities to store or access:

      (Average Daily Census & Potential Disaster Victims) + (Hospital & Medical Staff Members) + (Family Members Expected) X (Doses of Drugs for 24 hours)

= *On-hand Quantity*

D. Regional planning
   1. Determine the supply of pharmaceuticals and other supplies needed to meet the anticipated demands in your region to be able to provide a 72 hour supply.
   2. The availability of state stockpiles and the National Pharmaceutical Stockpile should be considered by each hospital in their individual planning.
   3. Access to these stockpiles is through the local emergency management system and must be a part of the emergency management plan for the specified region

II. Personnel

A. Maintain adequate staffing during bioterrorism attack
   1. Personnel call-back
   2. Extended shifts

B. Staffing and Personnel Safety
   1. Many staff members may be hesitant to respond if they feel their personal safety could be threatened by potential workplace exposure to agents while caring for victims, or that their family members may not be safe if they are left at home.
   2. To reassure staff members and to ensure their response to the hospital, the hospital should consider maintaining a supply of pharmaceuticals for staff/family treatment or prophylaxis.
   3. Hospital should administer an "allegiance survey" to:
      a) Estimate number of staff members and their families that may be on hand and potentially in need of treatment or prophylaxis;
      b) Question staff members, particularly medical staff members who may be on staff at other hospitals, about whether the hospital can count on their response; and
      c) Gather the information needed to plan for the safety and protection of all individuals on site.

III. Access to Back-up Pharmaceuticals and Supplies

A. Access to additional pharmaceuticals and supplies – essential to the planning process.
   1. Sources may be supply houses, drug wholesalers, retail pharmacies, other hospitals, clinics, or regional/state stockpiles.
   2. There must be a plan to access and receive the supplies which may require a Memorandum of Understanding (MOU) to ensure the receipt of these supplies.
   3. Verify hospital has MOU with local office of Emergency Management.

4. Each hospital should maintain information about cooperating institutions to determine:
    a) Types of pharmaceuticals and medical supplies available throughout the community should a disaster be declared.
    b) Type(s) of item(s) stocked and contact name(s) and contact information.
5. Understand that other hospitals, clinics, etc. may depend on these same back up supplies and plan accordingly.
6. The Texas Department of Health should be able to provide each institution with resources available in the area to assist with securing the item(s).
7. An established policy for accessing and transporting supplies should be included in the planning process.
8. There should be a plan in place to record and process the receipt of State resources and resources from the National Pharmaceutical Stockpile.

IV. Additional Hospital Pharmaceuticals and Supplies - Narcotics

One of the major needs of patients exposed to certain biological agents will be analgesics and sedatives. The hospital should maintain a 72-hour supply of analgesics and sedatives for the number of potential victims the hospital plans to accept.

V. Training and Education

Initial training and annual subsequent training should be documented in annual evaluations. Training should at a minimum include the following information: signs and symptoms, diagnosis, treatment, prophylaxis and isolation and decontamination procedures. Additionally, the employee should know their job responsibilities and their relation to the institution as well as how their institution integrates with the community disaster response plan. Regular disaster drills should be conducted to evaluate the disaster readiness of the institution.

Summary:

At the end of this planning process, your plan should address:

1. Maintaining an up-to-the-moment hospital inventory of essential pharmaceuticals.
2. Providing an environmentally controlled facility for interim storage of emergency pharmaceuticals.
3. Repackaging medications from bulk containers should that be necessary.
4. Regularly testing the pharmaceutical component of the regional response plan.
5. Maintaining an up-to-the-moment regional inventory of essential equipment and supplies.
6. Methods that will be used to request needed equipment and supplies in the event of an emergency.
7. The amount and type of pharmaceuticals and supplies necessary in the event of a

bioterrorist attack.

8. Access to additional resources as needed.

Action Items:

Actions	Assigned To	Completion Date
1. Calculate the maximum patient capacity of the hospital during a potential disaster.		
a. Base the calculation on the hospital's role as stated in the community's emergency management plans.		
b. Include capacity that could be created by doubling up patients in private rooms, using outpatient space for inpatients, and using non-clinical space for clinical care.		
c. Include capacity created by use of alternative sites for care.		
2. Calculate the numbers of hospital staff members who would be on-site over the course of a multi-day disaster response. Include contract staff members.		
3. Calculate the numbers of medical staff members that can be expected to respond during a disaster to this hospital versus other hospitals where they may also be on staff. This should be done as a result of surveying medical staff members regarding their response plans.		
4. Document initial training and annual subsequent training. Training should at a minimum include the following information specific to each biological agent: signs and symptoms, diagnosis, treatment, prophylaxis and isolation and decontamination procedures.		
5. Train staff to know their job responsibilities and their relation to the hospital as well as how their hospital integrates within the community disaster response plan. Regular disaster drills should be conducted to evaluate the disaster readiness of the institution.		
6. Assist hospital and medical staff members in planning for their family's disaster readiness. Collect information regarding their plans for sheltering family members or other dependents at the hospital as appropriate to the type of disaster and their plans for responding to the hospital.		
7. Using the formula provided in the guidelines, calculate the 24-hour inventory of pharmaceuticals to be maintained.		
8. Calculate needed inventory of narcotics (i.e., analgesics, sedatives) needed for 72 hours.		
9. Develop procedures for storing, maintaining, rotating stock, and quickly accessing the inventory of disaster medications.		
a. Include procedures for providing pharmaceuticals and		

other supplies to alternative sites.		
b. Include procedures for communicating with pharmaceutical suppliers, medical providers and hospital staff.		
c. Include procedures developed for receiving and using disaster pharmaceuticals and supplies.		
d. Include procedures developed in collaboration with the local authorities for receiving and using disaster pharmaceuticals and supplies from government stockpiles, including any city, state or national stockpiles that may be accessed.		
10. Ensure 3 day supplies to treat injuries resulting from "conventional" weapons or other disasters, including supplies for the four major categories of burns, orthopedic injuries, surgical injuries and psychological effects.		
11. Ensure 5 day supplies for basic day-to-day patient care, including food, water, linens, etc.		

Equipment:

Usual and customary supplies needed to prepare and administer all required pharmaceutical should be readily available. Other medical supplies and equipment should be available base upon the patient's needs.

Web Sites specific to Pharmaceuticals:

http://www.bt.cdc.gov/DocumentsApp/NationalStockpile/NationalStockpile.asp
www.cdc.gov/ncidod/srp/drugservice/immuodrugs.htm

Appendix:

Appendix A*: Drug Inventory
Appendix B*: Pharmaceuticals – External Partners

*Update information monthly and date each version

Appendix A*:

Drug Inventory

Biological Exposure (Adult)

BIOLOGIC AGENTS

Exposure/Treatment	Dose	Doses (per 24hr/per patient)
Pulmonary Anthrax		
Ciprofloxacin or	400mg IV BID	2
Doxycycline	100mg IV BID	2
Cutaneous Anthrax		
Ciprofloxacin or	750mg PO BID	2
Doxycycline or	100mg PO BID	2
Erythromycin	500mg PO QID	4
Anthrax Prophylaxis		
Ciprofloxacin or	500mg PO BID	2
Doxycycline	100mg PO BID	2
Cholera		
Ciprofloxacin or	400mg IV BID	2
Doxycycline	100mg IV BID	2
Plague Pneumonia		
Streptomycin and	1000mg IM BID	2
Doxycycline	100mg IV BID	2
Plague Meningitis		
Chloramphenicol	1000mg IV QID	4
Plague Prophylaxis		
Tetracycline or	500mg PO QID	4
Doxycycline	100mg PO BID	2
Q Fever		
Tetracycline or	500mg PO QID	4
Doxycycline	l00mg PO BID	2
Tularemia Treatment		
Streptomycin or	1000mg IM BID	2
Gentamicin	80mg IV TID	3

Exposure/Treatment	Dose	Doses (per 24 hr per patient)
Tularemla Prophylaxis		
Tetracycline or	500mg PO QID	4
Doxycycline	100mg PO BID	2
Brucellosis		
Doxycycline and	100mg PO BID	2
Streptomycin	1000mg IM BID	2

*** All IVs should be converted to PO when medically appropriate**

Smallpox
Vaccinia Virus (Vaccine) and Vaccinia Immune Globulin available only from government sources. Call CDC and local health department.

Appendix B*

PHARMACEUTICALS
External Partners

ORGANIZATION	*CITY/ COUNTY*	*COORDINATOR*	*E-MAIL*	*PHONE/CELL/PAGER*	*FAX*	*ASSISTANCE PLEDGED*

Patient Tracking and Transportation

Purpose: This guidance document is intended to provide a summary and recommendations for how a hospital can most effectively plan for the tracking and transportation of patients from one facility to another or to shuttle needed personnel to impacted facilities in the event of a biological incident.

Staff: The hospital manager directly responsible for coordinating and providing hospital transportation services as well as the manager responsible for patient records and the administrators to whom they report.

Recommendations: Transportation assets are the aircraft and vehicles utilized to move patients from the scene of a medical emergency to the hospitals for definitive care. These assets may also be used to transfer patients from one facility to another or to shuttle needed personnel to impacted facilities. The Incident Command System (ICS) or the local and state Emergency Operations Centers (EOC) will usually have access to and control the means of transporting patients. During the early moments following a biological incident, transportation resources may be very limited and hospitals may see patients arrive in a variety of ways. Effective use and control of these transportation assets will result in a more effective response to a biological event.

One of the most daunting tasks facing a hospital involved in a biological incident is tracking patient locations and accurate record keeping. The patient population will arrive at facilities in various manners and at various times and there may be uncertainty as to what exactly constitutes the definition of "patient". Initial documentation will be difficult due to the number of patients arriving at facilities and the demands for movement and rapid interventions.

Guidance

I. Transfer and Evacuation of Patients

Circumstances may dictate the need to evacuate patients from a facility. The patient load on the medical system despite expansion efforts may also dictate the evacuation of patients to facilities outside the area. Both circumstances will require a great deal of cooperation and integration.

A. Evacuation of a Facility
   1. If a hospital director feels that the potential exists for a hospital evacuation, he or she will:
      a) Notify the local emergency operations center (EOC).
         a) Give the specifics of the situation including any required assistance.
         b) Coordinate with the hospital command center to identify potential destination for the patient.
         c) The EOC will provide whatever resource support possible to assist the facility in avoiding an evacuation and will alert transport agencies.
   2. If the Incident Commander determines the need to evacuate, he/she will coordinate with the EOC and then proceed with evacuation plans.
   3. Patients will be evacuated to the following destinations:
      a) Within the existing facility (partial evacuation), if possible
      b) To facilities within the same hospital system
      c) To facilities within the geographical area
      d) To facilities within the region
      e) To facilities outside the region
   4. The compromised hospital will make copies of pertinent chart information to accompany the patient to the new location.
   5. The compromised hospital will also notify family members of the patient's condition and new location.

B. Presumptive Diagnosis of Patient with an Infectious Disease
   In the course of an epidemiological investigation or expanded surveillance activities, the local or state health departments may make a presumptive diagnosis of a disease that threatens to rapidly overwhelm the medical system's capacity.
   1. Public health officials will provide as much information as possible as to the infectious nature of the disease and the potential for a geometric growth in the number of patients.
   2. Local and state public health officials, in consultation with the Centers for Disease Control and the (Health and Human Services) HHS Office of Emergency Preparedness, will make a recommendation about moving part or all of the current hospital population outside the affected area.
   3. This process will need to be accomplished before the number of hospitalized exposed and/or infected patients reaches a number that negates any potential benefit to movement.

II. Movement of Patients Outside the Area

An incident may occur where the number of ill or injured patients far exceeds the capacity of the local healthcare system. A portion of the patient population may need to be moved to another location in order to facilitate treatment and recovery. The National Disaster Medical System (NDMS) exists to facilitate such an event. Coordination between local, state, and federal health officials will be required to facilitate the transfer of patients.

A. The activation and utilization of the system to move patients out of the area will take time to set up and function properly. Early recognition of the potential for an excessive number of patients is imperative to allow the necessary components to be mobilized and ready. Events that may lead to a compromised system include:
   1. A sudden unanticipated incident that has or may result in a large number of patients.
   2. Presumptive diagnosis of patients with an infectious disease that has the likelihood of spreading throughout the population.
   3. A sudden event that compromise hospitals and severely diminishes the level of available beds in the community.
   4. A series of events that individually do not pose a threat, but when combined, either create a large patient load or compromise the hospitals' ability to provide service.

B. Decision-makers will need reliable information immediately following any event that may compromise the system. The following are examples of the types of information that will be required on a frequent basis:
   1. Bed capacity
   2. Staffing levels
   3. Epidemiological projections
   4. Casualty estimates
   5. Facility capabilities

C. Hospitals and agencies that have access to this information must ensure that it is accurate, realistic, and available upon frequent demand.

D. The healthcare system will take steps to increase its capacity when faced with an increase in the number of patients requiring care. Hospitals may cancel procedures, utilize closed areas within their facility, transfer patients to other system facilities, or care for patients in auxiliary locations.

E. While these acts should and will occur first before patients are moved out of the area, decision-makers must determine as early as possible if these actions will be adequate. If there is any doubt, initial steps should be taken to activate the system for the forward movement of patients.

III. Sudden Incident with an Overwhelming Number of Casualties

A. Reporting of the estimate of the number of casualties from the incident.
   1. Hospitals in the area should be polled to determine the number and flow of self-

referring patients.

2. Each hospital should be polled for the number of available beds and an estimate of the number of beds that can be made available utilizing internal expansion plans.
3. The information needs to be relayed to local emergency management.
4. Other local, state and federal authorities will be consulted to determine available resources for the implementation of alternate care centers and staffing augmentation.
5. If these resources and capabilities do not appear to be adequate, the Director(s) of City Emergency Management will be notified of the potential need to move patients out of the area.

B. Evolving Incident with Increasing Patient Load
   1. Identify the entity that will act as the medical emergency response center in your region. The center will monitor the capacity of the local health care system to ensure an adequate level of beds and staffing exists to provide care and shelter for those patients who need it.
   2. When the system appears to be overloaded and cannot expand to accommodate any more beds for treatment, care centers should keep the local EOC updated. The local EOC should in turn advise the hospital's command center as to the potential for additional patients into the system

IV. Patient Tracking and Record Keeping

A. Documentation

While often placed at a low priority during a mass casualty event, proper documentation will prove critical after the incident in order to accurately perform clinical and operational critiques, quality assurance assessments, and injury epidemiology. Lack of adequate assessment and treatment documentation may preclude reimbursement for care rendered to the patient.

1. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) provides strict guidelines for hospitals to protect patient confidentiality, along with stiff penalties for violations. The requirements of the Act are not enforced during a declared disaster and facilities can share patient names and information with response agencies and other medical entities that are responding to the disaster. There are exceptions for HIPAA and Texas H&S Code Chapter 181 for Public Health Disease Surveillance activities.
   a) It should be understood that all information normally obtained from a patient will not be entered onto chart. The core information required should be decided ahead of time and printed on the pre-designated disaster chart.
   b) Attempts are being made to ascertain what minimal information third party payers will require on disaster patients in order to qualify for reimbursement. Those requirements should be incorporated into any pre-designated disaster chart.
2. Hospitals should have mass casualty treatment records and patient chart numbers

pre-designated prior to an incident.

3. Hospitals can consider amending currently used emergency room forms to reflect a minimum data set required during a disaster. This form should not vary extensively from those used daily, but emphasize the core data set required for reimbursement.
4. Initial assessment/treatment personnel should document the circumstances surrounding the injury in the patient's own words wherever possible. Capturing this information will assist with post-incident injury epidemiology and criminal investigations.
5. Upon discharge or admission, any triage tag should be attached to the chart or the information from the tag entered onto the chart.
   a) Paramedics in the field will be the initial contact with some patients and will provide as much documentation as possible of the patient demographics, chief complaint, and treatment. Scene operations often make documentation difficult, and facilities should expect some ambulances arriving with little or no patient documentation.
   b) Various tools are available to assist in the process of scene documentation and communications with those receiving patients. The hospital should work with their local ambulance service, trauma coordinators and the city's emergency operations center (EOC) to identify what kind of patient disposition forms, tags and decontamination process tags are used in the field.
   c) If there is an opportunity to standardize these forms in the community or region, hospitals have a better chance at both setting and meeting a standard of disaster documentation that is acceptable third party reimbursement companies. (Patient disposition sheets, triage tags, and decontamination process tags)

B. Under HEICS one of the first responders to the scene will attempt to ascertain the following information from patients transported from the scene to a healthcare facility:
   1. Name
   2. Age (DOB)
   3. Sex
   4. Triage Tag number
   5. Process tag number
   6. Social Security number (if possible)
   7. The first responder at the scene will record the transport location and identifier of each patient leaving the scene, and obtain records in order to reconcile the information to records from receiving facilities.

C. Patients will self-refer to the hospital. The first tracking contact may occur in the Emergency Department (ED). The ED staff will gather as much demographic information as possible to include at least the information mentioned above.

D. Patient information should only be released to those persons or agencies identified in the hospital's emergency management plan. These guidelines should coordinate with plans set forth by the local EOC.

V. Control and Utilization of Transportation Assets

Directly following a mass casualty incident, transportation resources may be very limited and hospitals may see patients arrive in a variety of ways. As the incident progresses with more control and additional resources, ambulances and busses will be the main means of patient arrival. Effective use and control of these transportation assets will result in a more efficient response to a mass casualty incident.

A. Types of Assets
   1. Ambulances: Operated by fire departments, private companies, or hospitals, ambulances normally are the primary means of transporting critical patients from a controlled scene. The majority of patients from a biological incident, however, may arrive at hospitals via other means (private vehicles or buses).
      a) Responders: These units will have the primary responsibility of scene response and management.
      b) Private: May augment the public safety response or be utilized for city coverage and/or inter-facility transfer.
      c) Hospital Based: May be used to augment scene response or provide inter-facility transfer.
   2. Helicopters can be invaluable in a mass casualty incident if their use is regulated and their limitations recognized.
      a) Helicopters can provide high-level care and rapid transportation.
      b) They also can add an additional risk to a scene and tie up resources forming landing zones.
      c) Helicopters will prove effective in the following instances:
         i. Augmenting ground transport in scenes with an overwhelming number of critical patients.
         ii. Rapid evacuation of patients from areas where ground transport has difficulty accessing or regressing.
         iii. Transport of patients to facilities away from impacted area.
         iv. Transport of patients to specialized facilities (burn/trauma) located a significant distance away.
         v. Transfer of patients between facilities.
         vi. Aerial surveillance of scene for ICS.
   3. Buses provide transportation for a large number of patients either from a scene to a facility, or from one facility to another. Public transportation busses will be available for use during any major disaster through the local emergency operations centers. Buses used for the transport of patients will have medical personnel on board to give report to the receiving facility.
   4. Private Vehicles: Up to 85% of the patients from a mass casualty incident may self-refer to facilities without utilizing public response agency transportation. Hospitals need to be prepared to identify and receive patients arriving in privately owned vehicles immediately.

B. Access to Transportation Assets
   1. Hospitals should anticipate the need for transportation resources during a major

disaster to transfer patients, move personnel, supplies, and medical records. Patients may need transportation home following discharge. Prior arrangements with couriers, taxi services, and private ambulances should be in place prior to an incident.

2. Requests for transportation should be coordinated with the local EOC.
3. Once patient evacuation has been determined to be necessary and a tasking order has been issued:
   a) GPMRC (Global Patient Movement Requirements Center) will issue bed reporting instructions to hospitals;
   b) Receive medical information about the victims.
   c) Determine medical equipment needed for flight.
   d) Coordinate movement to the airport, and communicate with National Disaster Medical System (NDMS)
   e) This process does not exclude the possibility that the need for evacuation could be so great that immediate movement would be required thus minimizing the amount of information collected.

V. Red Cross Disaster Welfare Inquiry System

The American Red Cross operates a Disaster Welfare Inquiry System during disasters to assist victims' family members locate, receive information about and/or reunite with their injured relatives. The main emphasis of this system is to locate, inform, and accommodate relatives from around the country concerned about loved ones or who need to come to the city to be with injured family members. Procedures should be established to provide information to the local Red Cross chapters to assist in this system.

Summary:

At the end of this planning process, your plan should address:

1. How to regularly confirm (acknowledge) the successful transmission and receipt of information to and from public health partners.
2. The plan to transfer patients among different facilities when all facilities in the region are responding to a biologic event. (include patient medical documentation)
3. Providing a general description of the plans to evacuate individual medical facilities when all other facilities in the region are responding to a biologic event.
4. The transfer and evacuation component of the regional response plan
5. The types of transportation methods and how they can be accessed.
6. How to document patient information and maintain patient confidentiality under extreme circumstances.

Action Items:

Actions	Assigned To	Completion Date
1. Communication of Request: Request for the transfer of patients initially can be made verbally. The request, however, ideally must be followed up with a written communication prior to the actual transferring of any patients. The patient-transferring hospital will identify to the patient-accepting hospital:		
a. The number of patients needed to be transferred		
b. The general nature of their illness or condition		
c. Any type of specialized services required, e.g., (Intensive Care Unit) ICU bed, burn bed, trauma care, etc.		
2. Documentation: The patient-transferring hospital is responsible for providing the patient-receiving hospital with the copies of patient's complete medical records, insurance information and other patient information necessary for the care of the transferred patient. The patient-transferring hospital is responsible for tracking the destination of all patients transferred out.		
3. Transporting of patients: the patient-transferring hospital is responsible for coordinating and financing the transportation of patients to the patient-receiving hospital: The patient-receiving hospital's senior administrator or designee will designate the point of entry. Once admitted, that patient becomes the patient-receiving hospital's patient and under care of the patient-receiving hospital's admitting physician until discharged, transferred or reassigned. The patient-transferring hospital is responsible for transferring of extraordinary drugs or other special patient needs (e.g., equipment, blood products) along with the patient if requested by the patient-receiving hospital.		
4. Supervision: the patient receiving hospital will designate the patient's admitting service, the admitting physician for each patient, and, if requested, will provide at least temporary emergency privileges to the patient's original attending physician.		
5. Notification: The patient-transferring hospital is responsible for notifying both the patient's family or guardian and the patient's attending or personal physician of the situation as soon as practical.		

Appendix

Appendix A: Detailed Location Information for Patient Receiving Areas
Appendix B: Transfer and Evacuation
Appendix C: External Partners
Appendix D: Multi-Casualty Incident Patient Chart Control and Utilization of Transportation

Appendix A:

Detailed Location Information for Patient Receiving Areas

ORGANIZATION	*STREET ADDRESS*	*CITY*	*PHONE NEAR PATIENT RECEIVING AREA*	*DIRECTIONS TO PATIENT RECEIVING AREA FROM IN-COMING HIGHWAYS*	*GPS COORDINATES OF PATIENT RECEIVING AREA*

Appendix B:

Transfer & Evacuation

ORGANIZATION	*COUNTY*	*COORDINATOR*	*E-MAIL*	*PHONE*	*CELL/PAGER*	*FAX*

Appendix C:

External Partners

ORGANIZATION	*CITY/ COUNTY*	*COORDINATOR*	*E-MAIL*	*PHONE/CELL/PAGER*	*FAX*	*ASSISTANCE PLEDGED*

Infection Control

Purpose: This guidance document is intended to provide a summary and recommendations for how a hospital can effectively protect itself from a biological incident. It is based largely on the Association for Professionals in Infection Control and Epidemiology (APIC) consensus paper Bioterrorism Readiness Plan A Template for Healthcare Facilities, April 1999. This guidance document also will provide recommendations regarding the minimum level of PPE and training that should be available within a hospital setting with no known special risks for exposures to hazardous materials.

Staff: The Infection Control Staff and others should be involved in the planning process.

Recommendations: To protect the hospitals from contamination and shutdown, and their staff members from exposure, all Texas acute care hospitals should have a plan that addresses measures to take in the event of a biological incident in accordance with a community-wide emergency management plan.

All acute care hospitals should stock an appropriate level of personal protective equipment (PPE) to carry out Standard and Transmission Based Precautions to last until additional supplies can be delivered. Baseline medical examinations should be done for all staff members anticipated to wear additional respiratory protection to ensure that they are in physical condition to safely wear PPE and can physically endure the experience. An individual hospital's PPE readiness can only be determined accurately by setting parameters and assessing if the hospital's current preparedness meets or exceeds those parameters. This must be done at the hospital level.

Guidance

I. General Categorical Recommendations for Any Suspected Bioterrorism Event

A. Reporting Requirements and Contact Information
Healthcare facilities may be the initial site of recognition and response to bioterrorism events. If a bioterrorism event is suspected, local emergency response systems should be activated. Notification should immediately include local infection control personnel and the healthcare facility administration, and prompt communication with the local and/or state health departments, FBI field office, local police, CDC, and medical emergency services.

B. Potential Agents
High priority agents include organisms that pose a risk to national security because they can be easily disseminated or transmitted from person to person; result in high mortality rates and have the potential for major public health impact; might cause public panic and social disruption; and require special action for public health preparedness. CDC has the following listed as Category A diseases/agents:
1. Anthrax
2. Botulism
3. Plague
4. Smallpox
5. Tularemia
6. Viral hemorrhagic fevers

C. Detection of Outbreaks Caused by Agents of Bioterrorism
Bioterrorism may occur as covert events, in which persons are unknowingly exposed and an outbreak is suspected only upon recognition of unusual disease clusters or symptoms. Bioterrorism may also occur as announced events, in which persons are warned that an exposure has occurred. A healthcare facility's Bioterrorism Readiness Plan should include details for management of both types of scenarios: suspicion of a bioterrorism outbreak potentially associated with a covert event and announced bioterrorism events or threats. Report any suspicion of bioterrorism to state and local health authorities, and local law enforcement to include FBI.
1. Syndrome based criteria
   Rapid response to a bioterrorism-related outbreak requires prompt identification of its onset. Because of rapid progression to illness and potential for dissemination of some of these agents, it may not be practical to await diagnostic laboratory confirmation. In consultation with the local health department, it may be necessary to initiate a response based on the recognition of high-risk syndromes that should alert healthcare practitioners to the possibility of a bioterrorism outbreak.
2. Epidemiologic features
   Epidemiologic principles must be used to assess whether a patient's presentation is typical of an endemic disease or is an unusual event that should alert healthcare providers to the possibility of a bioterrorism-related outbreak.

a) These include:
   i) A rapidly increasing disease incidence (e.g., within hours or days) in a normally healthy population.
   ii) An epidemic curve that rises and falls during a short period of time.
   iii) An unusual increase in the number of people seeking care, especially with fever, respiratory, or gastrointestinal complaints.
   iv) An endemic disease rapidly emerging at an uncharacteristic time or in an unusual pattern.
   v) Lower attack rates among people who had been indoors, especially in areas with filtered air or closed ventilation systems, compared with people who had been outdoors.
   vi) Clusters of patients arriving from a single locale.
   vii) Large numbers of rapidly fatal cases.
   viii) Any patient presenting with a disease that is relatively uncommon and has bioterrorism potential (e.g., pulmonary anthrax, tularemia, or plague).

D. Infection Control Practices for Patient Management

The management of patients following suspected or confirmed bioterrorism events must be well organized and rehearsed. Strong leadership and effective communication are paramount.

1. Isolation precautions

   Agents of bioterrorism are generally not transmitted from person to person; re-aerosolization of these agents is unlikely. All patients in healthcare facilities, including symptomatic patients with suspected or confirmed bioterrorism-related illnesses, should be managed utilizing Standard Precautions. Standard Precautions are designed to reduce transmission from both recognized and unrecognized sources of infection in healthcare facilities, and are recommended for all patients receiving care, regardless of their diagnosis or presumed infection status.

2. Personal Protective Equipment (PPE) and standard procedures prevents direct contact with all body fluids (including blood), secretions, excretions, non-intact skin (including rashes), and mucous membranes. PPE and standard procedures routinely used by healthcare providers include:
   a) Hand washing

      Hands are washed after touching blood. Body fluids, excretions, secretions, or items contaminated with such body fluids, whether or not gloves are worn. Hands are washed immediately after gloves are removed, between patient contacts and as appropriate to avoid transfer of microorganisms to the other patient and the environment. Either plain or antimicrobial-containing soaps may be used according to facility policy.
   b) Gloves

      Clean, non-sterile gloves are worn when touching blood, body fluids, excretions, secretions, or items contaminated with such body fluids. Clean gloves are put on just before touching mucous membranes and non-intact

skin. Gloves are changed between tasks and between procedures on the same patient if contact occurs with contaminated material. Hands are washed promptly after removing gloves and before leaving a patient care area.

c) Masks/Eye Protection or Face Shield
A mask and eye protection (or face shield) are worn to protect mucous membranes of the eyes, nose, and mouth while performing procedures and patient care activities that may cause splashes of blood, body fluids, excretions, or secretions.

d) Gowns
A gown is worn to protect skin and prevent soiling of clothing during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, excretions, or secretions. Selection of gowns and gown materials should be suitable for the activity and amount of body fluid likely to be encountered. Soiled gowns are removed promptly and hands are washed to avoid transfer of microorganisms to other patients and environments.

3. Patient placement
In small-scale events, routine facility patient placement and infection control practices should be followed. However, when the number of patients presenting to a healthcare facility is too large to allow routine triage and isolation strategies (if required), it will be necessary to apply practical alternatives. These may include cohorting patients with similar syndromes or even setting up a response center at a separate building.

4. Patient transport
In general, the transport and movement of patients with bioterrorism-related infections, as for patients with any epidemiologically important infections should be limited to movement that is essential to provide patient care, thus reducing the opportunities for transmission of microorganisms within healthcare facilities.

5. Cleaning, disinfection, and sterilization of equipment and environment
Principles of Standard Precautions should be generally applied for the management of patient care equipment and environmental control.

a) Each facility should have in place adequate procedures for the routine care, cleaning and disinfection of environmental surfaces, beds, bedrails, bedside equipment, and other frequently touched surfaces and equipment and should ensure that these procedures are being followed.

b) Facility approved germicidal cleaning agents should be available in patient care areas to use cleaning spills of contaminated material and disinfection non-critical equipment.

c) Used patient care equipment or potentially contaminated with blood, body fluids, secretions, or excretions should be handled in a manner that prevents exposures to skin and mucous membrane, avoids contamination of clothing, and minimizes the likelihood of transfers of microbes to other patients and environments.

d) Sterilization is required for all instruments or equipment that enter normally sterile tissues of through which blood flows.

e) Rooms and bedside equipment of patient with bioterrorism-related infections should be cleaned using the same procedures that are used for all patients as a component of Standard Precautions, unless the infecting microorganism and the amount of environmental contamination indicates special cleaning.
f) Patient linen should be handled in accordance with Standard Precautions. Facility policy and local/state regulations should determine the methods for handling, transporting, and laundering soiled linen.
g) Contaminated waste should be sorted and discarded in accordance with federal, stat and local regulations.

6. Discharge management
   Ideally, patients with bioterrorism-related infections will not be discharged from the facility until they are deemed noninfectious. However, consultation should be given to developing home-care instructions in the event that large numbers of persons exposed may preclude admission of all infected patients. Depending on the exposure and illness, home care instructions may include recommendation for the use of appropriate barrier precautions, hand washing, waste management, and cleaning and disinfection of the environment and patient care items.
7. Post-mortem care
   Pathology departments and clinical laboratories should be informed of a potentially infectious outbreak prior to submitting any specimens for examination or disposal. All autopsies should be performed carefully using all personal protective equipment and standards of practice in accordance with Standard Precautions, including the use of masks and eye protection whenever the generation of aerosols or splatter of body fluids is anticipated. Instructions for funerals directors should be developed and incorporated into the Bioterrorism readiness plan for communication.

E. Post Exposure Management
1. Decontamination of Patients and Environment
   For practical purposes the 1999 APIC document provides a good starting place to review options for decontamination. However, other groups such as EPA and CDC continue to offer additional guidelines and information in this important area and responders should continue to work with pertinent state and Federal organizations who are addressing these issues. The APIC 1999 consensus paper suggests the following for decontamination:
   a) The need for decontamination depends on the suspected exposure and in most cases will not be necessary.
   b) The goal of decontamination after a potential exposure to a bioterrorism agent is to reduce the extent of external contamination of the patient and contain the contamination to prevent further spread.
   c) Decontamination should only be considered in instances of gross contamination.
   d) Decisions regarding the need for decontamination should be made in consultation with state and/or local health departments.
   e) Decontamination of exposed individuals prior to receiving them in the

healthcare facility may be necessary to ensure the safety of patients and staff while providing care.

f) When developing Bioterrorism Readiness Plans, facilities should consider available location and procedures for patient decontamination prior to facility entry.
g) Depending on the agent the likelihood for re-aerosolization, or a risk associated with the cutaneous exposure, clothing of exposed person may need to be removed.
h) After removal of contaminated clothing, patient should be instructed (or assisted is necessary) to immediately shower with soap and water. Potentially harmful practices, such as bathing patient with bleach solutions, are unnecessary and should be avoided.
i) Clean water, saline solution, or commercial ophthalmic solutions are recommended for rinsing eyes.
j) If indicated, after removal at the decontamination site, patient clothing should be handled only by personnel wearing appropriate personal protective equipment, and placed in an n impervious bag to prevent further environmental contamination.

2. Prophylaxis and post-exposure immunization
   Up-to date recommendations should be obtained in consultation with local and state health departments and CDC.
3. Triage and management of large scale exposures and suspected exposures
   Each healthcare facility, with the involvement of the IC committee, administration, building engineering staff, emergency depart, laboratory directors, and nursing directors, should clarify in advance how they will be able to deliver care in the event of a large scale exposure. Facilities should incorporate into their Bioterrorism Readiness Plan processes for triage and safe housing and care for potentially large numbers of affected individuals. Facility needs will vary with the size of the regional population served and the proximity to other healthcare facilities and external assistance. Triage and management planning for large-scale events may include:
   a) Establishing networks of communication and lines of authority to coordinate on-site care.
   b) Planning for cancellation of non-emergency services and Procedures
   c) Identifying sources able to supply available vaccines, immune globulins, antibiotics, and botulinum anti-toxin (with assistance form local and state health departments).
   d) Planning for the efficient evaluation and discharge of patients.
   e) Developing discharge instructions for patients determined to be non-contagious or in need of additional on-site care, including details regarding if and when they should return for care or if they should seek medical follow-up.
   f) Determining availability and sources for additional medical equipment and supplies (e.g., ventilators) that may be needed for urgent large-scale care.
   g) Planning for the allocation of re-allocation of scare equipment in the event of a large-scale event (e.g., duration of ventilator support of terminally

affected individuals).

h) With assistance from the Pathology Service, identifying the institution's ability to manage a sudden increase in the number of cadavers on site.

F. Laboratory Support and Confirmation and Specimen Transport
   1. Facilities should work with local, state and federal public health services to tailor diagnostic strategies to specific events. Sampling should always be performed in accordance with Standard Precautions. Laboratory capacity for processing potential bioterrorism agents varies and each healthcare facility should know their capability and where and how to send specimens to higher capacity laboratories.
   2. Specimen packaging and transport must be coordinated with local and state health departments and the FBI. A chain of custody document should accompany the specimen form the moment of collection. Advance planning may include identification of appropriate packaging materials and transport media in collaboration with the clinical laboratory at individual facilities.

Summary:

At the end of this planning process, your plan should address:

1. The development of adequate isolation facilities to contain infectious patients
2. The development of adequate plans for the isolation and treatment of victims who have been contaminated
3. Access to appropriate amounts of PPE
4. Training staff to carry out all necessary duties associated with a biological event

Action Items:

Actions	Assigned To	Completion Date
1. Consult local and/or state community emergency management plans to determine the hazards and vulnerabilities identified by community planners that are associated with the needs for hospital isolation capabilities and capacities and compare with hospital categories listed in guidance document.		
2. Conduct an internal hazards and vulnerabilities assessment to identify hospital risks associated with the needs for hospital isolation capabilities and capacities.		
3. Review the state hospital licensing authority's requirements with regard to the number of isolation rooms required.		
4. Verify correct operation of existing isolation rooms.		
5. Consult with the Engineering Services Department and develop a plan to meet the needs for isolation facilities. This includes budgeting the funds and establishing a time frame for completion.		
6. Verify completion of any renovations or enhancements to isolation facilities.		
7. Develop a specific written site infection control plan that includes:		
a. Facility description to explain how the victims will be managed (patient flow) and identify possible cross contamination routes; identify controls that will reduce or eliminate cross contamination possibilities and immediate containment procedures.		
b. Safe packaging and transporting of specimens to higher level laboratories for a more complete evaluation.		
c. Demonstrated knowledge of how to access after hours contact with LRN regional laboratory.		
d. Description of how potentially infected patients will be evaluated before entering the hospital.		
e. Description of how the hospital will manage large groups of patients suffering from a single infectious disease - what are the plans (e.g., wards, transfer).		
8. Description of how the hospital will protect staff at the time of an epidemic emergency.		
a. Lists of response personnel and duties.		
b. Defined facility and surrounding community evacuation plan.		
c. A triage mechanism to deal with large numbers of		

"walking well" persons and a system to direct patients to other outpatient facilities or services if they do not to have a problem that requires immediate intervention.		
d. An overarching communications strategy that can provide basic emergency health information to patients who are ill but do not need hospital services.		
9. Develop a written plan for protecting the hospital from outside contamination of the environment.		
a. Include identification of all air intakes.		
b. Include a pre-determined method for closing each air intake.		
c. Ensure the supplies and materials are on hand to accomplish air intake closure.		
d. Include plans for verifying closure of dampers.		
e. Include plans for guarding and limiting access to air intakes during a heightened security situation.		
10. Consult local and/or community emergency management plans to determine the hazards and vulnerabilities identified by community planners that are associated with the needs for personal equipment (PPE) for hospital staff members.		
11. Conduct an internal hazards and vulnerabilities assessment to identify hospital risks associated with the needs for PPE for		
12. Determine PAR levels of PPE, in accordance with hospital and community emergency management plans.		
13. Obtain required PPE, either through purchase from a vendor, or through PPE distributed through the MMRS or other government program.		
14. Identify all hospital post-emergency responders who shall have duties requiring them to wear PPE.		
15. Conduct initial training of all designated hospital personnel that will be part of small health care team, in accordance with the training recommendations listed in the guideline		
16. Ensure that hospital infection control efforts link to local and state public health surveillance activities.		
17. Ensure that hospital laboratory and clinical infectious disease detection are coordinated with some persons ultimately responsible for both entities.		
18. Clinical infectious disease awareness starts at the emergency departments. Ensure that hospital emergency department staff is properly trained in disease recognition and knowledge how to report suspicious cases to state and		

local health departments on a 24-7 basis.		
19. Conduct at least annual training of all designated hospital personnel that will be part of small health care team, in accordance with the training recommendations listed in the guidelines		
20. Develop hospital plans for implementing back-up personnel and PPE, at the discretion of the hospital Director/Executive.	CEO	

Information Source:
APIC and CDC: Bioterrorism Readiness Plan – a Template for Healthcare Facilities:
http://www.cdc.gov/ncidod/hip/bio/13apr99APIC-CDCBIOTERRORISM.PDF

Appendix:
Appendix A: Patient Management Chart

Appendix A

Patient Management Med-Air Negative Pressure Rooms are: Room without Med-Air: **IMPORTANT PHONE NUMBERS** Infectious Disease Service xxx-xxxx Infection Control xxx-xxxx Texas Department of Health xxx-xxx-xxxx	**BACTERIAL AGENTS**	**Anthrax**	**Brucellosis**	**Cholera**	**Glanders**	***Bubonic Plague***	**Pneumonic Plague**	**Tularemia**	**Q Fever**	**VIRUSES**	**Smallpox**	**Venez. Equine Encephalitis**	**Viral Encephalitis**	**Viral Hemor. Fever**	**BIOLOGICAL TOXINS**	**Botulism**	**Ricin**	**T-2 Mycotoxins**	**Staph. Enterotoxin B**
Isolation Precaution																			
Standard Precautions for all aspects of patient care		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X
Contact Precautions			X								X			X					
Airborne Precautions					X						X			X					
Use of N95/HEPA mask by all individuals entering the room							X				X			X					
Droplet Precautions							X					X							
Wash hands with antimicrobial soap			X	X							X			X					
Patient Placement																			
No restrictions		X						X								X	X	X	X
Cohort 'like' patients when private room unavailable				X		X	X		X				X						
Private Room			X	X	X	X	X				X	X		X					
Negative Pressure											X			X					
Door closed at all times					X						X			X					
Patient Transport																			
No restrictions		X						X	X				X			X	X	X	X
Limit movement to essential medical purposes only			X	X	X	X	X				X	X		X					

Place mask on patient to minimize dispersal of droplets					X		X				X	X		X					
Cleaning, Disinfection of Equipment																			
Routine terminal cleaning of room with hospital approved disinfectant upon discharge				X	X			X	X		X	X	X			X	X	X	X
Disinfect surfaces with hospital approved disinfectant		X	X			X	X							X					
Dedicated equipment that is disinfected prior to leaving room			X								X			X					
Linen management as with all other patients		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X
Regulated Medical Waste handled per policy		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X
Discharge Management																			
No special discharge instruction necessary		X		X	X			X	X			X	X			X	X	X	X
Home care providers need to be taught principles of Standard Precautions		X	X			X	X							X					
Not discharged from hospital until determined no longer infectious							X				X			X					
Patient usually not discharged until 72 hours of antibiotics completed							X												
Post-mortem Care																			
Follow principles of Standard Precautions		X	X	X	X	X	X	X	X		X	X	X	X		X	X	X	X
Droplet Precautions							X												
Airborne Precautions											X			X					
Use of N95/HEPA mask by all individuals entering the room											X			X					
Negative Pressure											X			X					
Contact Precautions											X			X					
Routine terminal cleaning of room with hospital approved disinfectant upon autopsy			X	X	X			X	X		X	X	X	X		X	X	X	X
Disinfect surfaces with hospital approved disinfectant		X				X	X							X					

STANDARD PRECAUTIONS - Standard Precautions prevent direct contact with all body fluids (including blood), secretions, excretions, non-intact skin (including rashes) and mucous membranes. Standard Precautions routinely practiced by health care providers include: **Hand washing, gloves** when in contact with above, **mask/eye protection/face shield** while performing procedures that cause splash/spray, and gowns to protect the skin and clothing during procedures.

ACRONYMS & DEFINITIONS

Acronym	Definition
ANSI	American National Standards Institute
APIC	Association for Professionals in Infection Control and Epidemiology
BT	Biological Terrorism
CCRF	Commissioned Corp Readiness Force
CCU	Critical Care Unit
CDC	Centers for Disease Control
CNO	Chief Nursing Officer
COG	Council of Government
DHHS	Department of Health and Human Services
D-MAT	Disaster Medical Assistance Teams
D-MORT	Disaster Mortuary Teams
DOH	Department of Health
DoJ	Department of Justice
ED	Emergency Director
EMS	Emergency Medical System
EMTALA	Emergency Medical Treatment & Active Labor Law
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
EPR	Electronic Patient Record
ER	Emergency Room
ESF	Emergency Support Function
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
GPMRC	Global Patient Movement Requirements Center
HAM	Hand Held Amateur Radio
HEICS	Hospital Emergency Incident Command Systems
HHS	Health and Human Services
HIPAA	Health Insurance Portability & Accountability Act
ICP	Infection Control Practitioner

Acronym	Definition
ICS	Incident Command System
ICU	Intensive Care Unit
IF	Intermediate Frequency
JEOC	Joint Emergency Operations Center
JIC	Joint Information Center
LDAP	Leadership Development Action Plan
LHD	Local Health Department
MHMR	Mental Health and Mental Retardation
MMRS	Metropolitan Medical Response System
MOU	Memorandum of Understanding
MSU	Management Support System
NDMS	National Disaster Medical System
NEDSS	National Electronic Disease Surveillance System
NIH	National Institutes of Health
NPS	National Pharmaceutical Stockpile
OEP	Office of Emergency Preparedness
OEM	Office of Emergency Management
OHS	Office of Homeland Security
OSHA	The Occupational Safety & Health Administration
PIO	Public Information Officer
POC	Point of Contact
PPE	Personal Protective Equipment
ROC	Regional Operations Center
SEMA	State Emergency Management Agency
TALHO	Texas Association of Local Health Officials
TIFB	Telecommunications Infrastructure Fund Board
URL	Uniform Resource Locator
USAMRIDD	United States Army Medical Research Institute of Infectious Diseases
VHF	Viral Hemorrhagic Fever
VMI	Vendor Managed Inventories

Web Sites Relevant to Bioterrorism Readiness

- ***Centers for Disease Control (CDC), National Center for Infectious Diseases*** ***www.cdc.gov/ncidod***
  A superb resource for information on infectious diseases. Contains up-to-date information about nearly a hundred different diseases, including new and re-emerging illnesses. For many of these, this site also provides fact sheets that can be downloaded, images of the infectious agents, and links to other useful resources. Also provides a search engine and helpful information on travelers' health.

- ***CDC, Anthrax Site*** ***http://www.bt.cdc.gov/agent/anthrax/index.asp***
  CDC site containing frequently asked questions, fact sheet, news stories, and resources regarding anthrax.

- ***CDC, Drug Service*** ***www.cdc.gov/ncidod/srp/drugservice/immuodrugs.htm***
  Contains list of immunobiologics distributed by the Centers of Disease Control and Prevention. Includes general information and resources.

- ***CDC Bioterrorism Preparedness & Response Network*** ***www.bt.cdc.gov***
  This site provides information about chemical and biological agents, press releases, training, contacts, and other important information dealing with the public health aspects of bioterrorism preparedness and response.

- ***CDC: Programs in Brief: Bioterrorism and Public Health Preparedness*** ***www.cdc.gov/programs/bio.htm***
  Programs in Brief – general overview of CDC Bioterrorism programs including resources and links.

- ***CDC: Public Health Emergency Preparedness and Response – Role of Clinical Labs*** ***www.bt.cdc.gov/roleofclinlab.asp***
  A training program for lab and health professionals for Bioterrorism preparedness.

- ***National Foundation for Infectious Diseases*** ***www.nfid.org***
  In addition to information on NFID activities and publications, this site provides general information on infectious diseases and fact sheets on numerous specific diseases. Has useful links to other sites.

- ***NIH, National Institutes of Health, National Institute of Allergy and Infectious Diseases*** ***www.niaid.nih.gov***
  This site is most useful for information on NTAID-sponsored research. Browse the news releases for timely research news or click on the Division of Microbiology and Infectious Diseases for information on infectious disease research activities.

- ***AABB – American Association of Blood Banks*** ***www.aabb.org***
  The American Association of Blood Banks is an international association of blood banks, including hospital and community blood centers, responsible for collecting most of the nation's blood supply and transfusing more than 80 percent.

- ***American Red Cross – Homeland Security Advisory System*** ***http://www.redcross.org/services/disaster/beprepared/hsas.html***
  Recommendations for individuals, families, neighborhoods, schools and business. Includes a listing

of available publications.

- ***Federal Bureau of Investigation*** ***www.fbi.gov***
  Provides links to FBI field offices and contains copies of FBI press releases, as well as information on major ongoing investigations.

- ***CDC, Morbidity and Mortality Weekly Report*** ***www.cdc.gov/mmwr/indexbt.html***
  Provides information on disease trends, access to MMWR publications, and hotlinks to all state health departments and several other sites of interest.

- ***National Center for Health Statistics*** ***www.cdc.gov/nchs***
  Provides (mostly national) data about a number of infectious diseases using the "FASTATS" option. (For example, in 1997 there were 720 deaths attributable to influenza.) Also provides a search function, tabulated state data, and information and/or links to a number of federally-supported surveys and data collection systems.

- ***Federal Emergency Management Agency*** ***www.fema.gov***
  Provides extensive information on emergency management of all types of disasters, including large-scale infectious outbreaks and bioterrorist incidents. Contains information on the Federal Response Plan (FRP), the document that provides guidance to more than two dozen Federal agencies that provide emergency assistance to state and local entities in times of disasters.

- ***National Domestic Preparedness Office*** ***www.fas.org/irp/agency/doj/fbi/ndpo***
  The National Domestic Preparedness Office coordinates all federal efforts to assist state and local first responders with planning, training, and equipment to respond to a conventional or non-conventional weapon of mass destruction (WMD) incident. This site provides an overview of NDPO services and contact information.

- ***National Emergency Management Association*** ***www.nemaweb.org***
  NEMA is the professional association of state emergency management directors. This site contains NEMA policy statements, links to state emergency management contacts, and emergency management information and assistance resources for state officials.

- ***National Coalition for Adult Immunization*** ***www.nfid.org/ncai***
  From this site you can download adult and adolescent immunization schedules, identify state and local agencies with whom you might collaborate on adult immunization programs, and order educational materials.

- ***National Immunization Program*** ***www.cdc.gov/nip***
  From this site you can download the current recommended immunization schedules for children and adults and access additional NIP reference materials and publications. Click on "calendar" for a list of upcoming immunization-related conferences.

- ***Association. for Professionals in Infection Control & Epidemiology*** ***www.apic.org***
  Contains information on infectious diseases and hospital settings, including a "Bioterrorism Readiness Plan." The plan provides a general overview of what hospitals and other health care delivery entities need to consider when developing emergency response procedures for bioterrorism incidents.

- ***Association of Public Health Laboratories*** ***www.aphl.org***
  This site announces meetings and conferences relating to infectious and other diseases. The site provides links to most state public health laboratories.

- ***ASTDHPPHE*** ***www.astdhpphe.org***
  Click on "Infectious Facts" for a selection of fact sheets discussing more than *50* infectious diseases. Fact sheets are written at a level appropriate for the general public and frequently contain hotlinks to other sites of interest.

- ***Council of State and Territorial Epidemiologists*** ***www.cste.org***
  Contains lists of those diseases and conditions which health care providers and laboratories are required to report in each U.S. state. Also contains CSTE position statements and copies of *The **CSTE Washington** Report,* which relates political news of public health relevance.

- ***National Emergency Management Association*** ***www.nemaweb.org***
  NEMA is the professional association of state emergency management directors. This site contains NEMA policy statements, links to state emergency management contacts, and emergency management information and assistance resources for state officials.

- ***Environmental Protection Agency*** ***www.epa.gov/epahome/headline_100202.htm***
  Information regarding EPA's Homeland Security goals regarding protection from the effects of pollution and environmental degradation following a bioterrorism attack.

- ***Johns Hopkins University – Center for Civilian Biodefense Strategies***
  www.hopkins-biodefense.org
  A part of the University, The Center is an independent non-profit organization which provides studies and information regarding Bioterrorism.

- ***Texas Homeland Security*** ***www.texashomelandsecurity.com***
  Current national news and threat level; Governor's Task Force information, Texas Situation Reports, and other links.

- ***Environmental Hazards Management Institute*** ***www.hazmatforhealthcare.org***
  A program designed for hospitals and related organizations to create and/or improve their emergency response programs.

Bibliography

AnnexO – Human Services, City/County of El Paso, undated.

Bioterrorism Readiness Plan: A Template for Healthcare Facilities, APIC Bioterrorism Task Force and CDC Hospital Infections Program Bioterrorism Working Group, April 1999.

Bioterrorism Preparedness Planning Program, Arkansas Hospital, undated.

Bioterrorism Readiness Plan, Driscoll Children's Hospital, November 2001.

Bioterrorism Readiness Plan for Healthcare Facilities, Draft, State of Texas, undated.

California Hospital Bioterrorism Response Planning Guide, *Draft*, California Department of Health Services, October 10, 2001.

Disaster Readiness: Guidelines for Emergency Management Planners, HCA*,* undated.

Emergency Operations Plan, University of Texas Medical Branch, 2002.

Emergency Preparedness Communication Options, GNYHA, undated.

Emergency Response Communications Plan for Infectious Disease Outbreaks and Bioterrorist Events – Model, Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE), undated.

First Responder Plans, Alamo Area Council of Governments, undated.

Guide for All-Hazard Emergency Operations Planning, Federal Emergency Management Agency, September 1996.

Gulf Coast Trauma Planning Task Force Final Report, August 26, 2002.

Hospital Emergency Communications Directory, Kansas City Metropolitan Hospital Mutual Aid Memorandum of Understanding, September 2002.

Hospital Emergency Incident Command System, HEICS, Third Edition, Volume I, A project of San Mateo County Department of Health Services Emergency Medical Services Agency, June 1998.

Hospital Mutual Aid Memorandum of Understanding, Pennsylvania Region 13 Metropolitan Medical Response System, undated.

Draft

Hospital Preparedness for Mass Casualties Final Report, American Hospital Association with the Support of the Office of Emergency Preparedness, U.S. Department of Health and Human Services, August 2000.

Hospital Readiness, Defense Science Board, James Bentley, Ph.D., Sr. VP American Hospital Association, May 7, 2002.

Letter of Mutual Aid Agreement Among Fayette County Hospitals, Fayette County Hospitals, undated

Major Disaster Hospital Response Draft Plan, Dallas-Fort Worth Hospital Council, September 2002

Medical Management Biological Casualties Handbook, Fourth Edition, US Army Medical Research Institute of Infectious Diseases (USMRIID), Fort Detrick, Frederick, MD, February 2001.

MMRS Plan, Metropolitan Medical Response System (MMRS), undated.

NBC Readiness Guidelines, Parkland Health & Hospital System, September 2000

Preparing Hospital and Health Care System Management for an NBC Incident, Metropolitan Medical Response System (MMRS), Albuquerque, New Mexico, December 18, 2000.

Preparing Hospital and Health Care System Management for an NBC Incident (Deliverable #8) for the Albuquerque, New Mexico Metropolitan Medical Response System (MMRS), December 18, 2000.

Preparing for Bioterrorism: Harnessing the Strengths of the U.S. Hospital Sector (A Presentation to the Defense Against Bioterrorism), Kenneth D. Bloem, May 7, 2002.

Public Health Emergencies Operations Plan, Rochester Metropolitan Medical Response System, March 15, 2002.

Regional Emergency Medical Preparedness Steering Committee, San Antonio, Texas, November 2001

Weapons of Mass Destruction (WMD) Readiness Plan, undated, CHRISTUS SPOHN Hospital Memorial, Corpus Christi, Texas, Draft.