



ACUTE CARE CENTER

MODULAR EMERGENCY MEDICAL SYSTEM: CONCEPT OF OPERATIONS FOR THE ACUTE CARE CENTER (ACC)

MASS CASUALTY CARE STRATEGY FOR A BIOLOGICAL TERRORISM INCIDENT

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PREFACE

The Acute Care Center (ACC) concept is based on extensive consultation and research. The process used to develop and validate the ACC concept involved a literature review, a series of working group sessions, and the application of several operational research techniques, including computer modeling and independent panel review.

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The *Concept of Operations for the Acute Care Center* is the product of a multiagency working group, including representatives from the staffs of major academic medical centers, government, military, public health, and emergency management institutions and agencies. The BW IRP wishes to thank the members of the ACC Working Group for their dedication and contributions.

Disclaimer:

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorizing documents

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EXECUTIVE SUMMARY

The Domestic Preparedness Program (DPP) funds initiatives to aid U.S. communities in responding more effectively to acts of terrorism carried out by use of weapons of mass destruction (WMD). One of these initiatives is the Biological Weapons Improved Response Program (BW IRP). This program has designed an alternative medical care strategy, hereinafter referred to as the Acute Care Center (ACC). The ACC is envisioned to supplement the existing healthcare system in managing the overwhelming number of casualties that most likely would result from such an attack.

This *Concept of Operations for the Acute Care Center* was written to assist planners, administrators, responders, medical professionals, public health, and emergency management personnel in better preparing for and providing mass casualty care. The content of this document will be of particular interest to anyone involved in civilian preparedness for terrorism. This concept of operations describes the specific command organization, operational execution, and the logistical and staffing requirements associated with the ACC. Additionally, the document addresses the philosophy of care and operational considerations that must be considered when implementing the ACC strategy.

The aftermath of a large-scale bioterrorist event and its consequences on the fabric of society are almost unimaginable. Designing a healthcare delivery system to care for thousands or even hundreds of thousands of patients or victims when the local healthcare system is overwhelmed poses a daunting task for city or regional planners. This concept of operations is a peer-reviewed, local planning document that will provide a framework for developing a unified, comprehensive response that meets the needs of local communities and easily integrates the federal and state response. The ACC concept was developed by a multidisciplinary team as a realistic plan for providing basic care to patients when an overwhelmed medical system would most likely be unable to do so. The ACC is only one example of an auxiliary medical care facility.

The ACC plan was developed to provide the most good for the greatest number of people while using limited resources. In large-scale disasters, city or regional leaders will be forced to confront many difficult issues, some of which are addressed in this planning document. The developers of this concept realize that not all issues will apply to each region. In light of that, this document is intended as a starting point to develop plans, relationships, and procedures specific to each area. Planners may find it necessary to devote more resources to some areas while scaling back others. The overarching objective is to use available resources to provide a caring and safe environment for victims of a biological event.

Major issues covered in this document are as follows:

- Physical plant: location, size, characteristics, security needs
- Staffing: personnel needs, volunteers, credentialing
- Level and scope of care: disaster care vs. nondisaster care, agent-specific care vs. generic care, changing standard of care in mass casualty environments

- Command, control, and communication: Incident Command System, fail-safe communications
- Integration with federal and state response: framework of local response compatible with outside resources.

For planning purposes, the ACC must care for patients until the local healthcare system recovers enough to absorb the extra patient load. Depending on the agent involved, this may vary from a few days to several weeks. The ACC provides essentially one level of care equivalent to general medical inpatient care. An attempt has been made to create a framework that is flexible enough for application in many different scenarios. Peer review groups and a computer simulation model were used to validate the internal operations of the ACC concept under various agent scenarios.

This document should be useful in preparedness planning. By working together across federal, state, and local levels, an improved system to handle the unthinkable can be achieved.

CONCEPT OF OPERATIONS FOR THE ACUTE CARE CENTER

A Template for Providing Mass Casualty Medical Care Following a Bioterrorist Attack

1. INTRODUCTION

1.1 Purpose

This document, the *Concept of Operations for the Acute Care Center*, describes in detail the organization and operation of the Acute Care Center (ACC). This document expands upon those concepts outlined in the 1998 concept paper, *Modular Emergency Medical System (MEMS)*, prepared by the Biological Weapons Improved Response Program (BW IRP). This document is intended to provide a basis for standard operating procedure (SOP) development, and to assist disaster medical planners, coordinators, and responders at all levels in better managing the consequences of a biological incident. This report is the second in a series providing a comprehensive description of the MEMS mass casualty care strategy. The first report, *Concept of Operations for the Neighborhood Emergency Help Center (NEHC)* addresses a mass casualty care concept to increase the outpatient capacity of the local medical community.

1.2 Background

The BW IRP, under the Department of Defense (DoD) Domestic Preparedness (DP) Program, conducted a series of multiagency workshops in 1998 that focused on identifying improved approaches to managing the consequences of a bioterrorist incident. The BW IRP quickly concluded that the key to an effective response to a large-scale attack against a civilian population is providing systematic, coordinated, and timely care to victims. In an effort to address this issue, the BW IRP outlined a mass casualty medical care strategy called the MEMS. This mass casualty care strategy was designed to provide a focused and timely medical response to a huge number of victims by expanding and redirecting assets of the local medical community. The MEMS is based on the rapid organization of a community's medical assets into two types of expandable patient care modules, the ACC and the Neighborhood Emergency Help Center (NEHC). This strategy also establishes the framework from which outside disaster medical resources can effectively augment local medical response efforts. A network of modules integrated with an aggressive community outreach effort will better mitigate the effects of bioterrorism by easing the burden on a community's major medical facilities and enhancing the community's capability to care for large numbers of casualties. Although the MEMS is designed specifically to manage the consequences of a bioterrorist incident, it has applications for other catastrophic medical events. This concept paper, however, will address only the ACC component of the MEMS and how it relates to a bioterrorist event.

The intent of the ACC is to integrate proven effective concepts to maximize the strategy's application while minimizing the training required for its implementation. Although the ACC was designed specifically for managing casualties during a bioterrorist event, it may also be useful in responding to any catastrophic medical emergency. Many of the fundamental premises of commanding, controlling, and managing the incident are consistent with those of the Hospital Emergency Incident Command System (HEICS) developed by the State of California Emergency Medical Services Authority. The ACC model defines responsibilities, provides a logistical management structure, and specifies clear reporting channels. In addition, the ACC concept makes use of the Federal Response Plan's (FRP) Emergency Support Function #8 (ESF #8), Health and Medical Service Annex, which provides a framework for coordinating the

delivery of federal disaster assistance to state and local governments, as it pertains to an overwhelming medical disaster or emergency. More information on the FRP can be found at <http://www.fema.gov/r-n-r/frpl>. ESF #8 identifies the resources and methods for obtaining supplemental resources to meet the health needs of the victims following a major disaster, emergency, or terrorist attack, including a bioterrorist incident.

Another useful resource for state and local planners is the “Interim Planning Guide for Improving State and Local Agency Response to Terrorist Incidents Involving Biological Weapons.” This guide presents an integrated, multiagency, federal, state, and local approach for responding to acts of bioterrorism and provides a synopsis of resources available to emergency planners. The Interim Planning Guide is available for download SBCCOM’s website at http://hld.sbccom.army.mil/bwirp/bwirp_interim_planning_guide_download.htm.

1.3 Program Approach

In December 1999, the BW IRP sponsored the establishment of the ACC Working Group. The working group was charged with studying the issues associated with providing mass casualty care in response to a catastrophic bioterrorist incident and identifying a consensus-based strategy to improve the overall effectiveness of such a response. The BW IRP ACC Working Group project manager solicited participation from several federal, state, and local agencies; private institutions; and subject matter experts. Candidates were identified based on their specific knowledge and expertise in various public health, medical, and medical logistical backgrounds. The first task of the working group was to analyze and expand upon the ACC concept.

From January through October 2000, the ACC Working Group conducted a series of facilitated workshops focused on improving upon and refining the ACC concept. During the process, a computer simulation model was constructed to help participants conceptualize and analyze the concept’s design. An initial draft of the *Concept of Operations for the Acute Care Center* was prepared based on the working group discussions. The working group participants reviewed the initial draft, and in March 2000, an interim consensus was achieved pending the peer review to validate the concept.

In July 2000, the BW IRP invited an independent panel of experts to review the draft *Concept of Operations for the Acute Care Center* and validate the virtual model. The results of that review were presented to the ACC Working Group and revisions were made to the virtual model.

This version of the *Concept of Operations for the Acute Care Center* represents the first published draft of the ACC concept.

1.4 Assumptions

In developing the ACC concept, the following assumptions were applied:

- A large-scale bioterrorist incident will likely produce thousands to hundreds of thousands of casualties and/or fatalities, depending on the agent used.
- During a bioterrorist event, actual infected casualties and the worried well who seek aid will overwhelm emergency medical systems (EMS) and hospitals.

- Hospital resources will be redirected to care for the most seriously ill. Elective admissions will temporarily cease, but critical medical/surgical and 911 functions will continue.
- Establishing a system to rapidly expand inpatient acute care facilities will be necessary to provide rapid treatment to a large population of severely ill patients from an agent of bioterrorism.
- A simple system that rapidly integrates medical resources and provides massive casualty management will be needed.
- Emergency officials will communicate with the medical community during preplanning activities and during recognition of an event to assure healthcare workers that their safety and that of their families has been planned for and that prophylaxis and/or protection will be provided. It will be crucial to have accurate and timely dissemination of information to medical professionals to decrease their risk and concern of becoming secondarily infected and to encourage them to continue caring for patients.
- During a large-scale bioterrorist event, the standard of care in an affected community will change to provide the most effective care to the largest number of victims. In a mass casualty situation, healthcare workers will provide care to as many victims as possible, but individualized treatment plans may be rare or nonexistent. A decentralized team approach to providing basic medical care may be the most effective use of resources. Advanced life-saving technology and treatment options will likely either not be available or unable to be implemented due to lack of specially trained medical personnel.
- The expanded ACC facilities as well as medical personnel and supplies will be most efficient if directed to victims of bioterrorism-related illness only. Victims of such illnesses who also require acute or critical medical treatment of urgent conditions such as heart attack, traumatic injuries, or severe exacerbations of chronic conditions, such as diabetes mellitus, should receive care at an existing medical facility (i.e., hospital) where more diverse resources are available. The ACC should be an extension of a nearby medical facility (hospital) and transparent to the public. Ideally, the general public would seek initial care from either the NEHC or the emergency department (ED) of their local hospital.
- The type of agent used and resulting illness will determine the composition of the ACC. The number of casualties expected to survive versus expire will dictate the allocation of medical staff.
- The ACC will function more efficiently and require fewer specialized resources if the facility is located adjacent or very close to the supporting hospital(s) in the affected region.
- Physicians, nurses, and other licensed medical personnel will need to be quickly credentialed following preestablished policies. This function is best carried out by the office of emergency management (OEM) of the respective community, in conjunction with local sponsoring hospitals, before staff arrive at the ACC itself.
- Preplanning and sensitive surveillance systems are vital in reducing the impact that a bioterrorist event will have on a community. The better the surveillance system and preplanning, the more likely the ACC will have a positive impact and outcome following the event.

1.5 Concept Overview

Following a major bioterrorist event, emergency managers will need to coordinate an effective medical response for the enormous number of casualties seeking aid. As previously seen in other large-scale disasters, in addition to the large numbers of people actually affected, an outpouring of “worried well” or psychosomatic casualties will appear. So many casualties converging on hospitals will quickly overwhelm them. One strategy to effectively respond to the health and medical needs arising from such an incident is to activate and mobilize preplanned mass care facilities. During emergency operations, a community’s OEM may activate the previously described MEMS, which is one such strategy. Under this concept, ACCs will be quickly established in structures or buildings of sufficient size located close to existing hospitals to provide definitive and supportive care for acutely ill patients affected by an agent of bioterrorism. The maximum bed capacity of an ACC will be 1,000 beds (in increments of 250 beds); the ACC provides essentially one level of care equivalent to general medical inpatient care.

The ACC is designed, organized, equipped, and staffed specifically to provide inpatient medical services for those affected by an incident involving a biological weapon of mass destruction (WMD). The ACC is designed to treat patients who need inpatient treatment but do not require mechanical ventilation, and those who are likely to die from an illness resulting from an agent of bioterrorism. Patients who require advanced life support (ALS) such as that provided by intensive or critical care units will receive priority for hospital admission rather than admission to the ACC.

Restricting the type of patients treated at these centers serves two purposes. First, it allows a streamlined approach to patient care; in general, most patients will require similar treatment that follows preestablished critical pathways or clinical practice guidelines. Secondly, in situations where isolation is desirable but impractical, cohorting patients with similar infections/exposures from the same disease in one location limits exposure of noninfected persons to the disease (cohorting is recommended by the Association for Professionals in Infection Control and Epidemiology Inc. [APIC], and the Centers for Disease Control and Prevention [CDC]).

As a part of the coordinated response, area hospitals will close to elective, noncritical admissions and will identify current inpatients who are stable enough for discharge or transfer to another suitable medical facility that is likely located outside the affected locality. The National Disaster Medical System (NDMS) could be used to aid in the movement of these patients. Hospitals may off-load inpatients to the ACC who are presumed infected with the bioterrorist agent. Patients who present with symptoms of a bioterrorist-related illness and a concurrent medical or surgical emergency, such as heart attack or trauma, will be a priority for admission into the local hospital facilities and not the ACC. A staff consisting of physicians, nurses, respiratory therapists, nonlicensed patient care providers (nursing assistants), medical clerical personnel, maintenance or facility technicians, and civilian volunteers is required to operate the ACC. Precise numbers of each type of personnel will be dependent on the type of agent used and the resulting illness in a bioterrorist attack. For example, an attack resulting in a large number of patients requiring acute inpatient care but a low fatality rate might indicate a need for more registered nurses. Conversely, an attack with an extremely potent agent that has a high fatality rate might indicate a need for fewer registered nurses because the patients’ condition would deteriorate quickly, resulting in death.

Ideally, community emergency planners and the sponsoring hospital(s) will identify and pretrain a team of “core leaders” to facilitate the development of the ACC(s). This team may consist of a hospital administrator, a medical director (physician), a nurse with management level experience, and a logistics person, in addition to representatives from the community’s OEM. This team of core leaders will make operational decisions regarding staffing, supplies and patient care.

2. SCOPE

2.1 Risk Management/Policy

Depending on the scope and magnitude of the event, healthcare practices will likely have to change to effectively apply available assets to care for the greatest number of casualties. Decisions will need to be made to ration the use of the community's limited medical resources until significant mutual aid or federal resources arrive. Procedures for quickly credentialing licensed medical personnel will need to be preestablished by the community's OEM and consistent with federal and state statutes. Liability issues related to negligence and malpractice will likely have to be waived, as clinicians are asked to manage the high volumes of casualties. The standard of practice will likely differ from standards to which clinicians and patients are accustomed. The personal attention that is usually expected and received may become nonexistent. These circumstances will require medical decisions at every level to be made swiftly based on limited information. New medical care standards tailored for managing catastrophic casualty events must be developed to assist medical professionals in this time of devastation. Personnel with limited medical background or experience, such as medical or nursing students, may need to be assigned to patient care in some capacity. All healthcare providers will have atypically large patient assignments. Patient care will likely have to be prioritized and delivered in a scaled down manner. The design of the ACC considers such factors while attempting to provide the best care available under these conditions. The community's OEM is responsible for ensuring that adequate medical transportation and logistical support are provided to each of the ACCs to initiate and sustain operations.

2.2 Level of Care Philosophy

As with all disasters, responding medical personnel must be trained to understand that their natural instinct to deliver as much care as needed for each patient is not optimal and may be deleterious. Predefined criteria for the delivery of care (standing admission orders, discussed next) and guidelines for discharges will provide the framework to assist medical personnel in applying the reduced care delivery model.

The ACC will be designed and equipped to provide mass care only to patients of a bioterrorism-related illness who require inpatient treatment. When implemented, ACCs will concentrate on providing agent-specific and ongoing supportive care therapy (i.e., antibiotic therapy, hydration, bronchodilators, and pain management) while hospitals will focus on the treatment of critically ill patients. The ACC, therefore, **will not** have the capability to provide advanced airway management (i.e., intubation and ventilator support), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Advanced Trauma Life Support (ATLS), or Neonatal Advanced Life Support (NALS). Patients requiring an advanced level of care (i.e., critical/intensive care-level support) will be transferred to the closest hospital if bed space is available. Otherwise, supportive care will be provided to these individuals at the ACC. Women who develop active labor while in an ACC will be transferred on a priority basis to the nearest NEHC or hospital ED for obstetrical support and delivery.

The rationale for limiting the level of care at the ACC is based on the following:

- Hospitals have better access to the resources required to treat critically ill patients. These resources include cardiac monitors, oximeters, ventilators, free-flowing oxygen, intravenous pumps, and invasive monitoring equipment.

- Hospitals have better access to staff (i.e., respiratory therapists; critical care, emergency, and surgical nurses and physicians) experienced in resuscitation and care of critically ill patients. It is more efficient to concentrate these trained individuals in one location.
- The ACC is established when demand for healthcare exceeds existing resources. To aid patient survival, the ACC must be set up quickly to maximize its use of limited resources by streamlining its level of care to provide the maximum good to the greatest number of people. This is best accomplished by providing only antibiotics, hydration, bronchodilators, and pain management at the ACC. The primary focus on these four areas simplifies the logistics of setting up these centers and reduces the amount of supplies and equipment a community needs to cache.
- Providing a selective level of care minimizes the ethical decisions healthcare providers would need to make when only a limited supply of advanced care technology is available.
- This limited supply of equipment also eliminates healthcare providers' dependence on technology to provide mass care.
- A free-standing ACC faces a number of logistical barriers that directly affect the level of care that can be provided at the facility. An ACC established in a school gymnasium, community field house, or hospital cafeteria will not have necessary access to free-flowing oxygen, medical air to drive ventilators, or specialized electrical outlets required to provide critical care-level medicine. These locations do, however, offer the space necessary to provide agent-specific therapy and basic supportive care to victims of a bioterrorist event.
- Streamlining the care provided at the ACC will allow healthcare providers of various backgrounds to follow preestablished treatment guidelines.
- Recommending that an ACC be able to provide the same level of care that can be offered by a hospital puts an unrealistic burden on a community to provide unlimited resources (i.e., money, equipment, and personnel) to an ACC.

2.3 Standing Admission Orders

To facilitate rapid admission and treatment of casualties, standing predefined admission orders can be used. These admission orders provide a template for physicians to use in order to direct inpatient care. These standing predefined admission orders should address the basic components of agent-specific and ongoing supportive care therapy, such as antibiotics or vaccines, hydration, bronchodilators, pain management, and other provisions of basic patient care. Included in this *Concept of Operations for the Acute Care Center* document is an example of an appropriate template for an ACC admission. (See Appendix A, Sample Admission Orders.)

3. ORGANIZATION

3.1 Command Organization

The organization of the command and control structure for the ACC will be locally determined and will fit into the existing local emergency command structure. A copy of the organizational chart should be available and distributed to the staff when the ACC established. The example in Figure 3-1 is modeled after the nationally recognized Incident Command System (ICS) and the companion Hospital Emergency Incident Command System (HEICS). Refer to Appendix B, ACC Functional Components, for a detailed explanation of each component of the ACC.

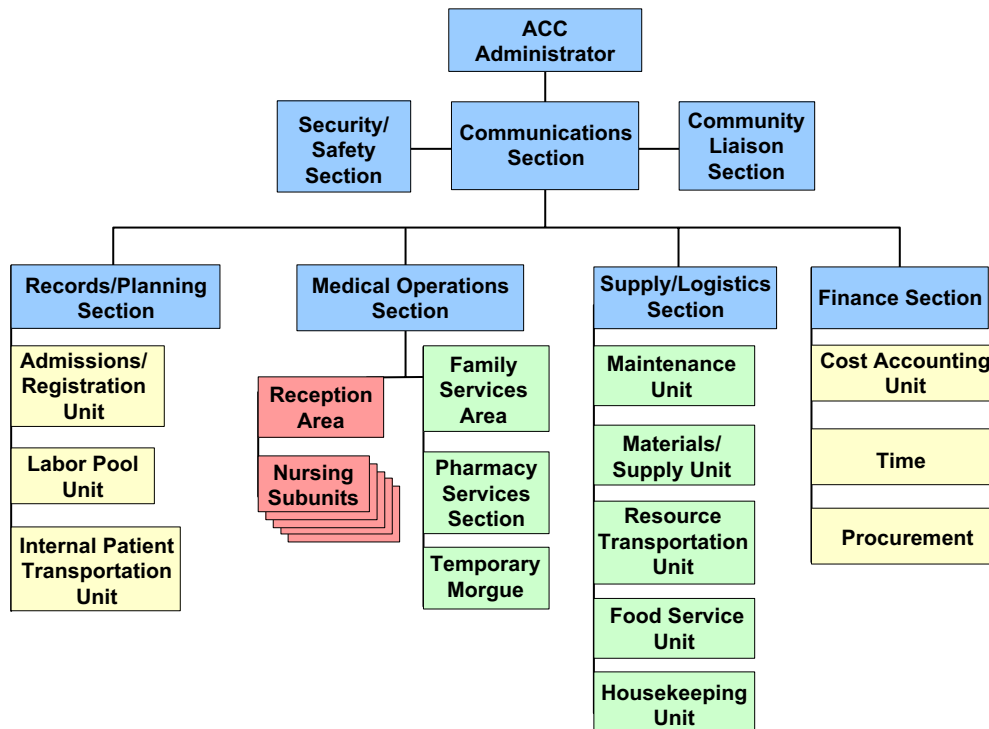


Figure 3-1. ACC Command Organization

This emergency management system reflects the following:

- The minimum management staffing requirements for the operation of the ACC.
- Recognition that these minimums will be mandated by the type of bioterrorist agent used and its effect on the emergency management and hospital structure of the community. This management structure can be modified to meet the needs of the local community's emergency command structure.

3.1.1 ACC Administrator and Main Components

The ACC Administrator is responsible for the command and control functions of the entire ACC. The ACC Administrator's role is to ensure that the ACC functions at the highest level of

efficiency possible with given staff and equipment. The most important function of the ACC Administrator is to facilitate and manage the flow of information into and out of the ACC. The Administrator should base the administration of the facility out of the Communications Section (CS) located within the ACC. The ACC Administrator is also responsible for all reporting requirements for the facility and generating situation/status reports that reflect patient and staffing activity when requested by the Medical Command Center (MCC) or community's OEM. The MCC, another component of the MEMS, is discussed further in Section 3.2, Patient Flow. The ACC Administrator directly oversees the Communications Section, Security/Safety Section, Community Liaison Section, Records/Planning, Medical Operations, Supply/Logistics and the Finance Sections, which are described below. Each section has a director who is responsible for day-to-day management.

3.1.1.1 Communications Section. The CS will be established as the hub of administrative activity of the facility. This is not to be confused with the community's Emergency Operations Center (EOC), which operates from another location and has broader responsibilities. The function of the ACC's CS is to maintain an activity log that documents all activities, including bed status reports, operational problems, and similar items. Representatives (Section Directors) from the other operating sections of the ACC will have a desk within the CS to facilitate communication and coordination of all actions. The Casualty Relocation Unit (CRU), also a MEMS component, will maintain its dispatch office within the ACC's CS using CRU internal communication while fully coordinating all patient transports with the ACC staff.

An ACC is a high-volume user of telecommunications and information technology. Communication is the most crucial function of the CS because it is the hub of incoming and outgoing information. The ACC Administrator maintains command and control from the CS with the assistance of the Communications Director. It is critical that the CS has a dedicated telephone and communication system to receive and transmit MCC and supporting hospital requests. Telephones need to be available in all offices, staff workstations, administrative areas, and nursing subunits. The use of multifunction, wireless communication devices should be considered. Additional phone jacks may be needed for facsimile machines and computer modems. If the building selected has an intercom or public address system available, consideration should be given to using it and developing guidelines for its use. Ideally, public telephones will be located near the designated waiting areas; but if not, signs (in English and other languages) should be placed indicating their location. Staff workstations should have dedicated internal lines or radio channels, if possible. If resources are scarce, the simplest system, which is face-to-face verbal communication using runners, may be employed. Telephone systems should be intact following a bioterrorist attack; however, as with all disaster situations, it is likely that standard telephone numbers will be deluged with incoming calls. For this reason, it is recommended that emergency planners arrange for one or more unlisted telephone numbers per ACC.

Ideally, a standardized electronic information system should be planned for and installed to support clinical management, patient tracking, and departmental administration. The existing hospital information systems should be evaluated during the preplanning stage by emergency planning officials to determine the feasibility of quickly providing this capability in the facility selected. Workspaces should be identified to include sufficient space for computer terminals, keyboards, mouse pads, and printers.

An area known as the Communications Base is required by ambulance personnel for report writing and communications with their respective headquarters. Direct radio communication

should be available between the ambulance services and the CRU. The most appropriate location for this base is within or near the ACC's CS area. If a high volume of ambulance traffic is likely, separate accommodations may be preferred to minimize the impact on the ACC's CS.

3.1.1.2 Security/Safety Section. Under the direction of the Security/Safety Director, the ACC should maintain an internal staff of security guards who are on duty 24 hours a day, 7 days a week. The nature of the facility, particularly the number of access points, will determine the exact requirements for security staff. Security personnel will issue the ACC staff identification (ID) badges to be worn by all staff while at the ACC. Security personnel stationed at access points should be tasked with checking the ID of anyone entering the facility. In addition to adequately staffing the access points, security personnel should be present in certain high-risk areas such as the pharmaceutical dispensary, medical supply areas, family areas, and temporary morgue. Having a secure parking area for staff members (that is patrolled by security personnel) or access to nearby public transportation is also an important consideration. The local law enforcement agencies will most likely play an invaluable role in the ACC's security plan.

The ACC should implement strict infection control procedures to protect staff, patients, and visitors. Patient care areas will have staff dedicated to maintaining sanitary conditions throughout the facility. A detailed discussion of environmental health, sanitation, and personnel protective equipment is provided in Section 5, Operational Considerations.

3.1.1.3 Community Liaison Section. The ACC Administrator will also establish and maintain a relationship with the community's OEM to issue information from and channel information to the ACC. The Community Liaison Director's role is to respond to the community concerns that affect the ACC and its mission. Media communications will be the direct responsibility of this director, who will establish contact with counterparts of all cooperating agencies and functions as a community representative and point of contact (POC). This person will coordinate ACC activities with the hospital and NEHC public information efforts. He/she will provide to the MEMS Public Information Office (PIO) all necessary casualty data, progress reports, and labor pool requests that might be released to the media. This person will also provide information to the local community as approved by the MEMS PIO. This process will be assisted by one or more liaison assistants, as necessary.

When established, the ACC does not function as a stand-alone operation, rather the ACC is but one component of a broader bioterrorism response system. For successful mass casualty care, the ACC must integrate and interoperate with other areas of the public health response. Given the potential magnitude and range of scenarios involved with bioterrorism, it is essential that medical integration and interoperability occur at every level: federal, state, and local. Integration with medical evacuation (e.g., casualty relocation units), outpatient care centers (e.g., NEHCs), community outreach, and the medical logistics systems is particularly critical. The ACC support service requirements include, but are not limited to, community outreach, physical security, social services, public affairs, billeting, feeding, waste management, logistics, and maintenance. The ACC must coordinate with appropriate command elements to ensure smooth, timely patient flow and to sustain operations.

3.1.2 ACC Functional Units

3.1.2.1 Records/Planning Section. A Records/Planning Director heads this section. This section consists of three functional units:

- Admissions/Registration
- Labor Pool
- Internal Patient Transportation

The Records/Planning Director should work very closely with the ACC Administrator to ensure that patient and personnel status is kept up to date. This section will manage all paperwork generated within the ACC. The Records/Planning Director will staff the Admissions/Registration area with a Patient Care Coordinator (PCC) and will maintain a control register identifying those patients admitted to the ACC. The PCC, while likely co-located with the Records/Planning Section, will support the whole ACC. The PCC's role is similar to a nursing supervisor in a traditional hospital. The PCC will maintain awareness of nursing staff and bed availability. The PCC will direct new patients into nursing subunits that have an available bed and staffing level that is able to receive the patient. As nursing subunits fill up, the PCC will direct patients to the proper subunit. The ACC is strictly an inpatient facility where patients are usually sent from the NEHC or a hospital's ED. Nonetheless, a record should still be kept of anyone who is administered care, even if that person did not arrive through conventional means (walk-ins).

The Records/Planning Section should also maintain staffing logs identifying anyone working at the ACC in any capacity. Patient registration, treatment, and disposition records are also the responsibility of this section. In addition, this section is responsible for managing all personnel who are not actively assigned to another section within the ACC, such as spontaneous volunteers or staff members who are in an available or out-of-service status within the facility. If staffing permits, a Labor Pool Unit Leader can be appointed to assist the Records/Planning Director with tracking the facility's personnel resources and providing extemporaneous training to new ACC staff members as necessary.

The Records/Planning Director will also supervise the internal patient transport section. The internal patient transport section will be responsible for moving patients from the Admissions/Registration area to their assigned bed or from their assigned bed to the morgue. Depending on their availability and the needs of the nursing staff, the internal transport staff may even be asked to assist in physically repositioning bed bound patients.

3.1.2.2 Medical Operations Section. The Medical Operations Section encompasses all clinical areas of the ACC. The Medical Operations Director is a physician responsible for directing the medical care for every patient entering the ACC. The Medical Operations Section consists of four main functional units:

- Nursing Subunits
- Pharmacy Services
- Family Services (if the ACC Administrator so chooses)
- Temporary Morgue

Because the Medical Operations Director is responsible for directing the medical care in the facility, this individual and the nursing subunit supervisors are tasked with ensuring that the staff

members in the ACC are operating within the scope of their practice and training. The director should have inpatient privileges at a nearby supporting hospital to ensure continuity and knowledge of the local policies and procedures. The Medical Operations Director should also oversee any ancillary operations within the ACC. If staffing levels permit, each nursing subunit (50 beds) within the ACC should have a unit leader (either a physician or registered nurse [RN]) assigned to expedite and optimize patient care rendered.

3.1.2.3 Supply/Logistics Section. A Supply/Logistics Director heads this area, often referred to as simply the Logistics Section. This section is responsible for all of the services and support needs of the ACC, including obtaining and maintaining the facility, equipment, and supplies. This section consists of the following five functional units:

- Materials/Supply
- Food Service
- Resource Transportation
- Housekeeping
- Maintenance

This section is tasked with the ordering activities for the procurement of equipment, supplies, food, and drink, as well as the handling of all contracting for services, supplies, and equipment. The Supply/Logistics Section is responsible for ensuring that all the supplies needed throughout the ACC are obtained with the exception of pharmaceutical supplies. Due to the specialized procedures surrounding the acquisition of drugs, this function should be the responsibility of pharmacy services in the Medical Operations Section.

There are specific refrigeration needs in any inpatient facility, including a temporary one such as an ACC. First, it is essential to have the capability to refrigerate medications separately from any bodily fluid specimens collected. Second, because the ACC is an inpatient facility, it must have an adequate food refrigeration system.

To ensure that adequate nutrition levels are met, a Food Service Unit Leader should be appointed to coordinate the proper feeding of both patients and staff. This individual can arrange for the delivery of food to the facility through local catering sources. Roughly 75 percent of the patients in the ACC who are able to eat will be fed through the catering sources. Because of disease-related dietary restrictions, the other 25 percent will need the assistance of the supporting hospital's food service. The Supply/Logistics Director should also appoint a Resource Transportation Unit Leader to manage the internal and external transportation services for personnel, supplies, and equipment. Close communication among the Supply/Logistics Director, the ACC Administrator, and other Section Directors is essential to ensure that the facility's resource needs are anticipated and met.

3.1.2.4 Finance Section. The ACC Administrator will determine if there is a need and if the resources are available for a Finance Section. Depending on the incident, there may be no need for such a section, or it may be carried out through the supporting hospital. If needed, however, the ACC Administrator may appoint a Finance Director to head this section. This person will be responsible for working with the other Section Directors on activities such as

providing monies for procuring special equipment or supplies, contracting with any vendors, timekeeping, cost analysis, collecting of personal insurance information from patients, if appropriate, and other financial aspects of the incident. Additional personnel may need to be allocated for this function. This section could be broken into three functional areas: time, procurement, and cost accounting, as necessary. Cost accounting is addressed in Appendix B, ACC Functional Components.

3.2 Patient Flow

Presented in Figure 3-2 is a model illustrating the flow of incoming bioterrorism casualties from NEHC or ED facilities to the ACC.

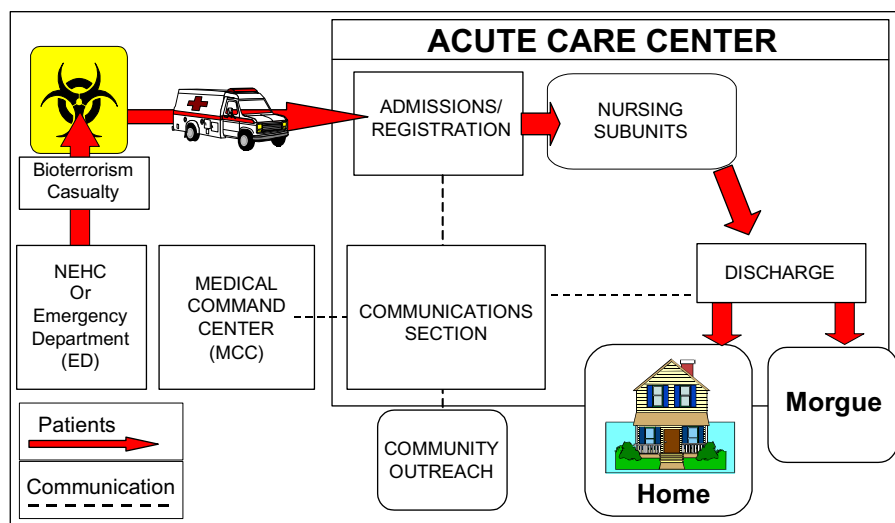


Figure 3-2. ACC Flow Diagram

Casualties will arrive at the ACC primarily through the CRU or ambulances. Before patients arrive, either the NEHC or the hospital ED should notify the MCC that patients need to be hospitalized. The MCC of the MEMS will determine where the patients will be admitted (hospital or ACC) and communicate that location back to the CRU staff. The MCC will also communicate to the ACC that there are incoming patients. The information to be relayed should include the total number of patients and any other pertinent details, such as how many patients require transfer by stretcher versus wheelchair.

As patients arrive, they should be directed to or dropped off at the ACC's Admissions/Registration area. The patients should be rapidly evaluated for placement and categorized by the PCC. As bed assignments are made, the Internal Patient Transportation Unit will move the patient from the Admissions/Registration area to an assigned bed in a nursing subunit. Approximately six transporters plus one transport clerk (for managing information and traffic control) per 250-bed pod will be required, in addition to the transport personnel assigned to each nursing subunit. Admissions will be spread among the nursing units so as to evenly distribute the workload associated with new arrivals. Patients will be sent from the Admissions/Registration area to their inpatient location with the additional admissions packet of

paperwork that includes physician orders (also known as standing admission orders; refer to Appendix A, Sample Admission Orders). These orders should be preprinted and cached during the preplanning activities of the community's OEM. Each patient's admission orders will be completed and tailored to meet the patient's individual needs based on the findings of the physician in the nursing subunit (not in the Admissions/Registration area). Patients who arrive without first having been triaged will be redirected to either an NEHC or hospital ED. The ACC is not designed to provide evaluative type patient assessments in the Admissions/Registration area. This area is intended solely to log patients into the tracking system and assign nursing unit and bed locations.

When the patient arrives at the assigned location, standard inpatient procedures will prevail, albeit in a more streamlined or scaled-down manner. The medical clerical personnel in each nursing subunit will be responsible for processing the physician's admission orders, while the RN will verify and sign that the orders were implemented. Nurses will complete an admission assessment on every patient and initiate the multidisciplinary plan of care. Standardized plans of care may be developed in advance based on the typical presentation of expected agents that might be used in a bioterrorist attack. Many present with flu-like symptoms, which are conducive to a template approach. Prestablished criteria to guide transfer and discharge decisions would be useful to promote patient movement through the system. This approach would assist the ACC in maintaining maximum bed availability for continued admissions of patients affected by bioterrorism-related illness.

Case managers and/or social workers will be responsible for discharge planning to ensure that those who need assistance at home receive such care. Discharge will include the collection of patient records and referral to psychological counseling or other human relief services and any follow-up that may be necessary. Preprinted agent-specific discharge instructions should be developed or obtained during the preplanning stages and cached for use in an actual incident. Patients will be discharged with these instructions and any starter packs of agent-specific medications that they might still require. As with the discharge instructions, when the agent is identified, discharge medications should be prepackaged if feasible. Discharges will be coordinated through the Admissions/Registration area for bed control and patient-tracking purposes. As de-escalation occurs, nursing subunits will naturally consolidate patients and resources, allowing unnecessary areas to be closed.

3.3 Nursing Subunit Design and Set-up

The ACC will be physically set up so that one 250-bed "pod", composed of five 50-bed nursing subunits is completed before beginning the physical setup of the next 250-bed pod. When the first 50-bed nursing subunit is completely set up and staffed, the ACC can begin to accept admissions. As more nursing subunits are completely set up with core staffing and supply resources, admissions can be distributed evenly across the nursing subunits until capacity is reached. A general guideline for admitting patients to the next nursing subunit could be when the current nursing subunit is at 70–80 percent capacity. When the first 250 beds reach 50–60 percent capacity, the next pod should be nearing completion and readying for receipt of patients. The Medical Operations Director must communicate with the CS to facilitate the opening of additional ACCs. The Medical Operations Director should control the opening of the various pod and nursing subunits. ACC pods that are not located within the same physical structure may require duplicate resources, such as temporary morgues or admissions/registration areas. In addition, as each 250-bed pod is filled, a nursing "pod manager" should be appointed

by the PCC to assist in managing patient flow and resolving any patient or staffing issues encountered. Similarly, the Medical Operations Director should identify a physician to become the “physician manager” of each pod, who assists in managing patient care and resolves any medical/clinical issues that may arise. The physician pod manager should be the individual who is the most experienced in managing acutely ill patients.

3.4 Facility Requirements

3.4.1 Site Selection. Deciding where to locate the ACC will have a major influence on the eventual cost and operational efficiency of the center; and that decision should be made in conjunction with medical response staff. The ACC should be set up in a preexisting structure as close as possible to its supporting hospital for ease of transferring patients and sharing of resources such as laboratories and diagnostic capabilities. The ACC’s onsite resource requirements will increase in direct proportion to the distance it is from the supporting hospital.

3.4.2 Parking and Access. The locations of building access points must be carefully considered. The Admissions/Registration area of the ACC should be located on the ground floor for ease of patient access. Car parking should be as close to the entrance as possible, well lit, and available exclusively for patients, their relatives, and in particular, ACC staff. There should be designated areas for ambulances and buses that drop off and pick up patients. This area should be well marked and be as close to the Admissions/Registration area as possible.

Designated parking areas will also be needed for the following:

- Ambulances that are not in use
- Taxis and private vehicles to pick up patients (including those with limited mobility)
- Family and other visitors
- Police vehicles
- Logistical resupply vehicles

The patient reception entrance should be clearly identified (in English, Spanish, and other languages as necessary), using signage, from all approaches. The reception entrance should also be properly illuminated to allow for good visibility and to facilitate a safe environment at night.

3.4.3 Building. The combined size of the ACC’s nursing subunits should be large enough to effectively care for at least 250 inpatients. The exact allocation of space for each area will be largely determined by the facility used; however, for planning purposes, the ACC base model consists of five 50-bed nursing subunits. If needed, the ACC design allows for expanding its capacity by simply adding subunits within a given facility as space permits.

(1) Total Space. The minimum size of a functional ACC that can incorporate all of the major areas is approximately 40,000 to 48,000 square feet. The total size and number of nursing subunits will also be influenced by factors such as facility layout, number of patients and staff, availability of technology and staff, patient acuity, and the medical logistics support structure.

Space determinants revolve around the major functional areas of the ACC, which can be further divided into the following areas:

- Communications
- Admissions/Registration
- Nursing (or patient care) subunits
- Multipurpose family/visitor area (waiting room, counseling, etc.)
- Multipurpose staff area
- Pharmacy/medication preparation
- Supply storage and distribution
- Staff workstations
- Support services (e.g., storage, bathrooms, utility)
- Food services
- Maintenance
- Transportation dispatch and equipment
- Secure area (for patient valuables, deceased persons' belongings)
- Temporary morgue

Lastly, when evaluating and planning the best use of space, it is important to consider the need for enough space to maneuver and circulate between beds and equipment.

(2) Recommended Buildings. Examples of buildings suitable for use as an ACC include National Guard armories, gymnasiums, schools, hotel conference rooms, health clubs, and community centers. These buildings are recommended because they contain separate rooms with large floor space for patient care, bathrooms, kitchens, and laundry facilities, and have electrical and communication links. These facilities are also likely to be equipped with adequate parking, loading ramps, and backup electrical generators. Hotel conference rooms can easily become substitute hospital wards that provide adequate space for beds, tables, and chairs, and have running water, climate control, storage areas, and restroom capabilities, among other amenities. Schools, community centers, and health clubs are similar in that they have large open areas as well as segregated restrooms, office space, and shower facilities in addition to comparable logistic capabilities (running water, climate control, storage, etc.). Schools also contain cafeterias, public address systems, and lounge facilities. Another factor that makes schools and National Guard armories attractive options is that they are generally publicly owned structures, making it presumably easier for emergency officials to rapidly commandeer such a building in the event of a disaster. Regardless of choice, it is strongly recommended that emergency planning officials designate appropriate facilities in advance and begin discussions to negotiate agreements for use in mass casualty incidents.

(3) Doorways and Corridors. All doors through which patients may pass must be of sufficient size to accommodate wheeled stretchers and wheelchairs with attached intravenous poles and other equipment with ease. Corridors should be wide enough to allow the cross-passage of two-wheeled stretchers or wheelchairs or other delivery carts without difficulty. There should be adequate space for personnel and equipment to enter, exit, and maneuver in any of the rooms.

(4) Electrical Supply. The electrical supply to the ACC should be surge-protected to guard against damage to electronic and computer equipment. All computer terminals and powered medical equipment should have access to emergency power. The community's OEM should plan to have emergency generators and uninterruptible power supply (UPS) units available for the ACC.

(5) Heating and Air Conditioning. The ACC should have climate control appropriate to its environment.

(6) Lighting. Adequate artificial lighting for clinical areas is important for performing procedures, assessments, and direct patient care. Ideally, clinical areas should also have exposure to daylight wherever possible to minimize patient and staff disorientation.

(7) Floor Coverings. The floor covering in all patient care areas and corridors should have the following characteristics:

- Impermeable to water and body fluids
- Durable
- Easy to clean
- Nonslip surfaces (no carpeting of any kind)

(8) Hand Wash Facilities. If water is available for handwashing, basins should be available within every patient care area in readily accessible locations at the ratio of approximately one for every 10–25 beds, depending on layout. If water is not available, or facilities are inadequate, waterless, alcohol-based hand cleaners should be freely distributed.

(9) Refrigeration. The selected facility should have either onsite refrigeration capabilities or adequate electrical supplies to handle the demands of temporary refrigeration containers.

3.3.4 Layout Considerations

(1) General Layout. The nursing subunits should be centrally located to the other areas of the ACC. The Admissions/Registration area is the focus of the initial patient presentation and admission procedures and should be located at the main entrance of the building. The nursing subunits provide inpatient medical management services and should be easily accessible from the admissions area. The Communications and Supply/Logistics sections should be accessible to the nursing subunits but should not impair the clinical functions of the ACC. Such support areas are best arranged around the periphery or upper floors of the building.

(2) Traffic Pattern (Patient and Supplies). The ACC layout should allow rapid access to every area with a minimum of cross-traffic. Close proximity is desirable between the

Admissions/Registration area and the nursing subunits. This factor becomes apparent at times of high workload as staff may require temporary relocation to manage surges in patient admissions. Visitor and patient access to public areas of the ACC should not traverse the clinical areas. Protection of visual, auditory, and olfactory privacy is important while recognizing the need for observation of patients by clinical staff. Support, material services, and, in certain cases, specialized care or counseling areas may be used. If so, they should not be located where they could impede patient flow or patient care.

(3) Bed Spacing. Patient care areas should allow at least 2 feet of clear floor space between beds. The bed spacing should not restrict routine patient care activities and ideally should provide convenient and adequate storage space for disposable/nondisposable medical supplies. There should be complete access to the patient and enough circulation space to allow movement of staff and equipment around the patient's bed. Storage space may consist of modular plastic bins or other similar design concepts.

(4) Provisions for Medical Gases (Oxygen). Provision of medical gases (oxygen) is a logistically complex and expensive undertaking. Each community will need to evaluate its resources in determining whether to provide oxygen therapy in the ACC. The building used to house the ACC will probably not have internal medical gas lines. Therefore, if emergency planners determine that oxygen will be provided at the ACC, they should consider, for example, developing a multiple branch-line system that pipes medical gases to each nursing subunit and patient bed. This may be accomplished by using portable cylinders; however, it may be more practical to construct a temporary liquid oxygen manifold system because of the sheer number of cylinders that would be needed (one E-cylinder of oxygen lasts an average of 4 to 8 hours for one patient at a flow rate of 2 liters/minute). It is strongly suggested that a biomedical engineer be involved in the setup of the oxygen delivery system, should it be deemed feasible. (See Appendix C, Oxygen Logistics and Delivery Set-Up.)

4. STAFFING REQUIREMENTS

The potentially enormous number of patients seeking treatment will cause hospitals to fill to capacity, requiring them to fully engage all their available staff. Staffing for the ACC will require personnel from either nearby hospitals, possibly temporary staffing agencies, or more likely, National Guard units, Army Reserve units, or Disaster Medical Assistance Teams (DMAT). The issue of finding adequate numbers of medical professionals to staff an ACC is one that requires creative preplanning. Local communities may need to negotiate mutual aid agreements that specify where additional staff may be obtained while awaiting the arrival of federal resources. It is not expected that an affected community will have the extra staff resources to open an ACC independently. Clearly, the majority of ACC staff will have to come from outside the affected area. Furthermore, planning should include communicating projected health and medical staffing shortfalls to the Department of Health and Human Services (DHHS) Office of Emergency Preparedness (OEP). As the lead support agency under the Federal Response Plan's (FRP) Emergency Support Function #8 (ESF #8), DHHS is responsible for assisting communities with preplanning and mobilization of health and medical personnel. DHHS OEP is heading up a national effort to assist select communities in developing local Metropolitan Medical Response Systems. These efforts in particular should consider preplanning that includes identifying ACC staffing requirements.

Staffing agencies that specialize in providing staff during hospital nursing union strikes are another resource to investigate because they typically provide personnel from outside the affected (strike) area. To ensure that the ACC operates in tandem with the supporting hospital, planners might consider distributing some of the hospital's regular staff among the temporary personnel. This is advantageous because it provides a base of staff who have valuable information, such as departmental phone numbers or procedural knowledge.

Potential types of medical providers who will staff the ACC include physicians and other healthcare providers who may not have inpatient general medical skills or who are still in training. It is highly beneficial to the entire operation of the ACC if some physicians whose current practice includes management of hospitalized patients are dispersed among the ACC's temporary medical staff. The temporary staff of doctors may not have used their acute care medical skills in many years. Additionally, they may not be current in treatment regimes or have the ability to start or administer intravenous lines, or even recognize the symptomatology of a life-threatening illness.

The nature of the medical needs and the shortage of staff in a bioterrorist incident may make traditional role delineation impractical. Therefore, divisions of responsibilities for various aspects of patient care and program administration will be based on knowledge, experience, special talents, and to some extent, interests of individual staff members. In this way, each staff member's particular abilities will be fully used and operations will run more smoothly. Nonmedical personnel, such as clerks and volunteers, will be engaged extensively throughout the ACC to lessen the burden on the clinical staff. Volunteers will be used if available; however, the ACC design is predicated on the assumption that they will *not* be available. Comprehensive personnel requirements and duty descriptions for the Communications Director, Section Directors, and functional unit leaders are covered in Appendix D, Job Action Sheets. Job Action Sheets for additional personnel can be written using the unit leader descriptions as a guide. For staff members to work as a team, individual flexibility and good communication based on mutual respect are necessary. Coordinating procedures should be implemented to outline administrative concerns, such as chain of command, scheduling, and staff absences. The ACC Administrator is

ultimately responsible for ensuring that appropriately educated and qualified professionals staff the ACC during operation. Staffing an ACC is a major challenge, and in practical application, it may be that an ACC cannot be opened until outside staffing resources arrive. Workers' Compensation insurance should be provided to all staff as disaster declarations are made. The ACC will likely operate on two rotating 12-hour shifts.

Suggested minimum staffing per 12-hour shift for a 50-bed nursing subunit follows:

- One physician
- One physician's assistant (PA) or nurse practitioner (NP) (physician extenders)
- Six RNs or a mix of RNs and licensed practical nurses (LPN)
- Four nursing assistants/nursing support technicians
- Two medical clerks (unit secretaries)
- One respiratory therapist (RT)
- One case manager
- One social worker
- Two housekeepers
- Two patient transporters

The minimum number of staff providing direct patient care on the 50-bed nursing subunit per 12-hour shift is 12, which includes the physician, the physician extenders, nurses, and nursing assistants. The physician will be assigned the entire subunit, while the nursing staff will operate in a team approach. Members of the patient care team will have tasks assigned that are consistent with their scope of practice.

Policymakers will need to establish minimum prerequisite job qualifications to ensure that the practitioners have at least the baseline credentials to practice in the ACC. Credentialing of physicians and other licensed medical personnel should be preplanned and is the responsibility of the OEM. As a part of the preplanning activities related to credentialing, the OEM needs to establish a policy for physicians who are licensed in other states (as well as other licensed care providers), and determine what entity is responsible for providing malpractice insurance coverage and protection from future lawsuits for the medical providers. Examples of credentialing requirements are as follows:

- **Physicians.** Physicians are responsible for directing the medical care provided in the ACC. This includes the medical evaluation, diagnosis, treatment, and disposition of the patient. All physicians who staff the ACC should be credentialed, including the Medical Operations Director. It is recommended that some of the ACC physicians possess training, experience, and competence in acute care settings sufficient to evaluate and initially manage and treat the patients who seek care at the ACC.

- Physician Assistants (PA)/Nurse Practitioners (NP). These care providers must possess appropriate credentials and undergo the same credentialing process as the physicians. They are responsible for assisting in the care of the patients, including assessment planning and evaluation of response to medical interventions. They must be able to provide evidence of patient care experience. They must be capable of providing patient care in austere circumstances. Experienced providers with these advanced practice credentials may function as physicians within the ACC.
- Nurses and Paramedics. These care providers must possess appropriate credentials as well. They are responsible for the nursing care of patients, including assessment planning and evaluation of response to medical interventions. They must be able to provide evidence of direct patient care experience. They must possess and show evidence of the knowledge and skills necessary to deliver the care required by patients admitted to the ACC and do so in austere circumstances. Retired RNs may be used in a manner (either as nurses or as nursing assistants) that is consistent with the policies of the affected locality and the state in which the event occurs. The policy regarding this should be determined in advance by emergency planning officials in conjunction with the supporting hospital.
- Medical Clerical Personnel. The clerks in the ACC are responsible for generating the paperwork necessary to run an ACC. They are the facilitators who coordinate moving patients through the ACC. They are responsible for answering phones and ensuring that all communications are carried out within the ACC and other modules in the MEMS. They are required to have some experience in a medical environment and to understand medical terminology. Finally, they are responsible for supervising the nonmedical volunteers in their sections.
- Emergency Medical Technicians (EMT) and Nursing Assistants. These technicians are responsible for providing assistance to the nursing staff in the care and treatment of patients in the ACC. EMTs must possess current licenses, while nursing assistants should show evidence of either recent relevant experience in providing direct patient care or certification as a nursing assistant or a similar role. Both EMTs and nursing assistants should have actual experience in the medical field using their license/certificate/training. Nursing and medical students may also be potential sources of labor for filling this role.

5. OPERATIONAL CONSIDERATIONS

A discussion of some of the operational components involved in the deployment of an ACC follows. (See Appendix B, ACC Functional Components, for detailed descriptions of the various functional components of the ACC.)

5.1 Extemporaneous Training

Extemporaneous training provides all the orientation and background information necessary for staff members to effectively operate within the ACC organization. The ultimate success of the ACC will depend largely on the effectiveness of this training. At a minimum, all staff members should receive some form of training that addresses the mission of the ACC, site orientation, standard operating procedures, and the responsibilities of each member of the ACC. Staff should receive this training before the opening of the ACC or their initial shift. New clinical staff who report after the ACC has opened must be oriented to their immediate role, environment, and the ACC in general by either the PCC or the pod manager. Nonclinical staff reporting after the ACC opens will be oriented by their respective unit “manager.”

Training should include, but not be limited to, the following:

- Personal protective measures, including infection control measures (handling and disposing of infectious waste, agent-specific transmission prevention measures, etc.)
- Standard operating procedures
- Information on the agent and treatment modalities
- Standard reporting procedures
- Response to outside requests for information
- Patient confidentiality

The Records/Planning Director, in concert with the Medical Operations Director, is responsible for ensuring that training occurs.

5.2 Job Action Sheets

Job Action Sheets are a simple method for assigning and identifying roles and responsibilities for all personnel. They are straightforward job description checklists outlining critical activities for a specific job position. Disaster situations are unpredictable and extremely variable. These aspects, coupled with staff turnover, excitement, anxiety, and feelings of urgency or haste may confuse even experienced personnel. Roles are easily forgotten in the urgency of the moment. Job Action Sheets are used in addition to the extemporaneous training to teach staff what to do; when to do it, and to whom they report. To ease the burden of memorizing protocols, each staff member is issued a sheet that prioritizes a detailed description of the critical actions necessary for successful performance. (See Appendix D, Job Action Sheets.)

5.3 Patient Records

A functional medical record must be established for every individual who is treated at the ACC. This record accompanies each patient throughout his/her stay and is available to the medical staff as needed for documenting the treatment provided and the patient's response to such. All records must be complete, legible, and thorough. Initially, each patient will arrive at the ACC with some paper documentation that was started in either the NEHC or the transferring hospital's ED. Upon arrival to the ACC, additional components of the patient's medical record will need to be added. A basic admission package of paperwork should be minimally composed of preprinted standing admission orders, medical history, and physical checksheet, multidisciplinary progress notes, and nursing flowsheets (for documenting vital signs, intake and output [I&O], activities of daily living [ADL], etc.). Nursing documentation requirements should be scaled down as much as possible, and charting by exception is highly recommended. It is recommended that each ACC adopt the standardized inpatient record system of the supporting hospital in the most simplified form possible, which will facilitate the transfer and management of patient information.

5.4 Patient Tracking

Patient tracking is the responsibility of the Records/Planning Director. Patient demographics will be captured on each patient at the time of admission. The Admissions/ Registration area will maintain a patient register (patient logbook) that includes information such as the dates of the patient's admission and discharge and the nursing subunit where the patient was admitted. When the patient is ready for discharge, the nursing subunit will notify the Admissions/Registration area of the location to which the patient is being discharged. This information will also be recorded on the patient register. A copy of the patient register should go to the community's EOC and the MCC at the ACC because they are responsible for handling requests for patient location and bed availability. Accurate patient tracking is a critical function of the ACC as relatives, media, and incident investigators will be trying to locate individuals during this stressful time. If an automated admissions/patient tracking system can be preplanned by the OEM, the Admissions/Registration area staff will need to be trained on the system during their extemporaneous training.

5.5 Medical Equipment and Supplies

Necessary medical equipment and supplies should be predetermined and cached for emergency use wherever possible. If stockpiling is not feasible, emergency planners must identify mechanisms for rapid acquisition of required supplies. Appropriate stocks of necessary medical supplies and equipment must be available or easily obtainable at all times to sustain continuous operations. (See Appendix E, Medical Equipment List.)

5.6 Pharmacologic and Therapeutic Drugs and Agents

Necessary drugs and agents must be made immediately available to the ACC. An initial starting point for emergency planners is to perform a survey of area hospital pharmacies, community pharmacies, and area/regional pharmacy warehouses. Planners should identify all possible sources for obtaining necessary drugs, as well as the volume available from each source. Communities should expect to be self-sufficient for up to 72 hours following an attack. For each source, a phone number that provides 24-hour access to the appropriate authorized individual(s) must be obtained. A mechanism for the emergency acquisition of large quantities of supplies as

well as one for the distribution of these medications to hospitals, NEHCs, and ACCs will be required. Law enforcement agencies may be a possible resource for picking up and delivering the pharmaceutical supplies, especially as they provide a secure mechanism for doing so. In addition, some supplies are available via the CDC's National Pharmaceutical Stockpile Program. More information is available via their web site, www.cdc.gov.

The actual experience of one large community that has already performed this type of survey confirms the presumption that procedures for emergency pharmaceutical acquisition are nearly nonexistent. Therefore, it is strongly recommended that emergency planners negotiate in advance this type of agreement with local pharmaceutical suppliers and pharmacies. To assist communities in this inventory assessment, sample forms have been included in Appendix F, Pharmaceutical Supplies. Ideally, the OEM would stockpile the appropriate drugs if financially/logistically possible and have area hospitals buy their "Just in Time" supplies from that source. Most pharmacies purchase pharmaceuticals on an as-needed basis because they receive frequent deliveries from their suppliers. This system is referred to as the "Just in Time" system. If drugs are cached, shelf-life and stock rotation must be considered.

It may become necessary to provide security for pharmaceutical suppliers if public panic ensues or is deemed imminent. Emergency planners must also identify mechanisms for stockpiling or rapidly acquiring critical medications such as antibiotics. Before use, pharmaceuticals should be inspected to ensure that the drugs have not surpassed their active shelf-life or have not been adversely affected by storage conditions (refrigerated storage accommodations may be required for certain medications). A list of stock medications that could be the minimum inventory list for an ACC is included in Appendix F, Pharmaceutical Supplies. An excerpt from the U.S. Army Medical Research Institute of Infectious Diseases *Medical Management of Biological Casualties* is included in Appendix G, BW Agents – Vaccine, Therapeutics, and Prophylaxis as reference for chemotherapy and chemoprophylaxis dosage regimes.

5.7 Environmental Health and Sanitation (Housekeeping)

The principles of Standard Precautions should be generally applied for the management of patient care equipment and environmental control. At a minimum, the ACC should have policies to address the following environmental health and sanitation issues:

- Each facility should have in place adequate procedures for the routine care, cleaning, and disinfection of environmental surfaces, beds, bedside equipment, and other frequently touched surfaces and equipment. To ensure that these policies are met, it is recommended that consideration be given to the use of pretreated, disposable germicidal wipes throughout the ACC. Environmental Protection Agency (EPA)-approved germicidal cleaning agents should be available in patient care areas to use for cleaning spills of contaminated material and disinfecting noncritical equipment.
- Used patient care equipment that is soiled or potentially contaminated with blood, body fluids, secretions, or excretions should be handled in a manner that prevents exposures to skin and mucous membranes, avoids contamination of clothing, and minimizes the likelihood of microbial transfer to other patients, personnel, and environments.
- Policies should be in place to ensure that reusable equipment is not used for the care of another patient until it has been properly cleaned and reprocessed, and to ensure that single-use patient items are appropriately discarded.

- Sterilization is required for all instruments or equipment that enters normally sterile tissues or through which blood, intravenous (IV) fluids, or medication flow.
- Rooms and bedside equipment of infected patients should be cleaned using the same procedures that are used for all patients as a component of Standard (Universal) Precautions (see detailed explanation in Section 5.8), unless the infecting microorganism and the amount of environmental contamination indicates special cleaning. Special disinfection of bedside equipment and environmental surfaces may be indicated for certain organisms that can survive in the inanimate environment for extended periods of time. The methods and frequency of cleaning, as well as the products used, can be determined by the supporting hospital's existing policies.
- Patient linen (if not disposable) should be handled in accordance with Standard Precautions. Although linen may be contaminated, the risk of disease transmission can be minimized if it is handled, transported, and laundered in a manner that avoids transfer of microorganisms to other patients, personnel, and environments. Facility policy and state/local regulations should determine the methods for handling, transporting, and laundering soiled linen.
- Contaminated medical waste should be sorted and discarded in accordance with federal, state, and local regulations.

5.8 Personnel Protection Measures

Agents of bioterrorism are generally not transmitted from person to person except for very specific diseases, such as smallpox or pneumonic plague; re-aerosolization of biological agents is unlikely. All patients in the ACC should be managed using Standard (Universal) Precautions. Standard (Universal) Precautions (which include Universal Precautions for blood and body fluids) 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. For certain diseases or syndromes, additional precautions may be needed to reduce the likelihood for transmission. Descriptions of these precautions may be found on the CDC web site (www.cdc.gov).

Standard (Universal) Precautions prevent direct contact with all body fluids (including blood), secretions, excretions, nonintact skin (including rashes), and mucous membranes. Standard Precautions routinely practiced by healthcare providers include the following policies:

- Within each ACC, policies should be in place for preventing occupational injury from an exposure to blood-borne pathogens in accordance with Standard (Universal) Precautions, which synthesizes the major features of Universal Precautions, designed to reduce the risk of transmission of blood-borne pathogens, and Body Substance Isolation, designed to reduce the risk of transmission of pathogens from moist body substances.
- Strict handwashing after touching blood, body fluids, secretions, excretions, or items contaminated with such substances, regardless of whether gloves were worn, must be practiced by any personnel having direct patient contact or direct contact with items used by patients. Hands are to be washed immediately after gloves are removed, between patient contacts, and as appropriate to avoid transfer of microorganisms to other patients and the

environment. Either plain or antimicrobial soaps may be used according to the supporting hospital's policies.

- Clean, nonsterile gloves are worn when touching blood, body fluids, secretions, excretions, or items contaminated with such substances. Clean gloves are put on just before touching mucous membranes and nonintact 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.
- Face masks and eye protection, such as goggles or face shields, are worn to protect the mucous membranes of the eyes, nose, and mouth while performing procedures and patient care activities that may cause splashes of blood, body fluids, secretions, or excretions.
- A gown (typically one that is disposable and fluid-resistant) is worn to keep clothing from being soiled during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. Selection of gowns or gown materials should be suitable for the activity and amount of contamination likely to be encountered. Soiled gowns are removed promptly, disposed of properly, and hands washed to avoid transfer of microorganisms to other patients and environments.

5.9 Provisions for Children and Family Members

Providing effective care to children poses unique challenges, especially in a disaster situation. Children have special needs, both physically and psychologically. The following child care concepts should be considered when planning and operating an ACC:

- If possible, healthcare providers with child care experience should be incorporated into the staff mix of the ACC. When making patient care assignments every attempt should be made to assign staff with pediatric experience to the children requiring care. These providers have developed special skills and experience that are crucial in caring for young children. Cohorting children together in the same nursing subunit may also be an effective strategy for staffing purposes.
- Ensure that pediatric supplies are included in the medical equipment and supplies stockpiling and acquisition efforts. Children require smaller-sized equipment and supplies, different medication dosing, and, in some cases, completely different treatment measures.
- As much as is reasonably possible, minimize separation from parents, particularly in children under the age of 5 years. Children who are not separated from their parents or primary caregiver generally have a better capacity for dealing with stress and are more likely to be cooperative with medical treatment. Emergency planners should consider the likelihood that parents who are able may not want to leave their children at all; hence, overnight accommodations may become necessary, along with subsequent bathing and dining accommodations.
- Try to establish and maintain a routine for children. Children who maintain daily routines tend to have less physical resistance, aggression, negativism, and regression.

- Involve the family in the care of children as much as possible (bathing, feeding, dressing, etc.).
- Whenever procedures are performed on young children, they should be completed as quickly as possible, and the parent(s) or family member should be present for comfort. Ideally, all the procedures the child requires should be performed at the same time so that the child can “get it over with” all at once. Procedures should be explained thoroughly to both the child and the parent(s), and if possible, a separate procedure room should be established away from the nursing subunit to reduce anxiety levels in the other children in that unit.
- If time and resources permit, establishing a play area for children can be a crucial therapeutic tool in their recovery. Play allows them to work through their feelings in a nonthreatening and comfortable manner.
- Prepare parent(s) or family members and the children for discharge by including community resources they can access if behavioral or health issues arise.

5.10 Staff Support Services

At least one room should be provided within the ACC to enable staff to relax during rest periods. There should be allowance for food and drink to be prepared and appropriate table and seating arrangements should be made available. The room or facility should be isolated from the nursing subunits so that the staff can relax and discuss feelings and issues regarding patients out of the sight and hearing of both patients and visitors. The room should have adequate lighting and floor and wall coverings to provide a relaxing atmosphere. The ideal facility would have a separate area for staff to prepare for their shift or to prepare to leave for the day. Staff should have access to their own toilet facilities that are not shared with patients and visitors. Again, it would be ideal if the building had shower facilities and lockers so that the staff could clean up before leaving their shift. Having the ability to shower before leaving the ACC would provide the staff with some peace of mind and a low level of decontamination. Surgical scrubs (if provided) could be picked up and dropped off here so staff could easily change before and after their shifts.

It is also strongly recommended that emergency planners consider the following to address healthcare workers' fears:

- Providing risk awareness education, including frank discussions of potential risks and measures for protecting healthcare providers
- Inviting staff to actively and voluntarily participate in the quality assurance process
- Providing daily incident updates
- Involving fearful or anxious healthcare providers in other useful roles

5.11 Epidemiological and Public Health Investigation

One of the major challenges that emergency planners face in a bioterrorist incident is to effectively determine the scope and magnitude of the event. To do this, a massive epidemiological investigation will be initiated. Investigators may need frequent access to

medical providers, patients, and patient medical records. Emergency planners should ensure that the ACC is constructed and operated in a way that supports this critical public health activity.

5.12 Patient Disposition

Most bioterrorism agents are not associated with secondary spread of infection to healthcare providers or families. For certain agents, such as pneumonic plague or smallpox, victims of bioterrorism will ideally not be discharged from the facility until they are deemed noninfectious. However, consideration 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 recommendations for the use of appropriate barrier precautions, handwashing, waste management, and cleaning and disinfecting the environment and personal care items. In addition, home care instructions should provide information on the remaining treatment regime and any follow-up care that may be required. Patients will be discharged from the ACC when they are able to care for themselves (toilet, feed, dress themselves) or when they are recovered enough to go home with someone who will assist in their care and recovery.

Postmortem care will be conducted in the ACC's Temporary Morgue area in accordance with established federal guidelines. The Temporary Morgue will provide the initial fatality processing and temporary storage of remains until they are transferred to the appropriate mortuary services provider. When an individual is pronounced dead, his/her personal data will be recorded and filed for victim tracking purposes. The remains will be tagged, and all clothing belonging to the deceased will be discarded by the nursing personnel before the body reaches the morgue. The individual's personal effects will have been inventoried and secured during the admission procedure. Death notifications will be handled through official channels only.

5.13 Food Services

One of the greatest challenges facing the ACC Administrator will be to provide food for both patients and staff. A crisis situation will limit the options available to emergency planners and the ACC Administrator. Careful preplanning is critical to ensure that the plan and system are in place to accomplish this mission. There are two viable options for providing food services: (1) catering all meals to both patients and staff, or (2) catering all meals that can be catered and having special dietary needs handled by the supporting hospital's food service department. If possible, all meals should be catered, as the supporting hospital's food service department is likely to be overextended from supporting their inpatients and staff. Emergency planners need to have contingency catering contracts in place to support the ACC(s). The catering contract should require that the caterer supply all plates and eating utensils needed for each meal.

5.14 Hospice Care

Hospice care is a compassionate method of caring for terminally ill people. Hospice is a medically directed, interdisciplinary team-managed program of services that focus on the patient/family as the unit of care. Hospice care is palliative rather than curative, with an emphasis on pain and symptom control, so that a person may live out the last days of life fully, with dignity and comfort (National Hospice and Palliative Care Organization). In the event of a bioterrorist incident that is lethal enough to cause high casualty and death counts, hospice care will be a significant part of the medical services provided by the ACC. Therefore, adequate

supplies of pain medicine, such as intravenous morphine must be available, as well as policies surrounding its use.

The psychosocial aspects of the mixed inpatient population that is likely to exist in the ACC will be complex. Patients who are expected to die may be located next to patients who are improving. Families of both will be in close proximity to each other. Varying beliefs and traditions surrounding death and dying will become evident and may cause already stressful conditions to worsen. Chaplains and other religious personnel should maintain a presence in the ACC around the clock if at all possible. Staff unfamiliar with hospice care and hospice goals should be briefed on both as they will be the first resource the patient and families use to assuage fears and receive accurate information on prognosis and treatment.

5.15 Provider Credentialing

The OEM has the overall authority and responsibility for human resources during a disaster situation. One responsibility is to develop emergency hiring procedures using appropriate outside resources as available. Inherent in this is the responsibility for verifying that the minimum criteria for clinical practice in the case of licensed medical professionals and in particular, physicians, physician assistants, nurse practitioners, and registered nurses, has been met. The OEM should work in conjunction with local hospitals or managed care organizations in credentialing licensed healthcare providers in accordance with procedures outlined by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). When physicians and other medical professionals report to the ACC for duty, the credentialing and verification process should already be complete and ideally, a temporary identification badge should have been issued. To assist the OEM in establishing its credentialing policies and procedures, the following should be considered:

- Physicians, PAs, and NPs. The minimum core criteria that should be verified for physicians are licensure, picture identification (e.g., driver's license), education, training or experience, clinical competence, and ability to perform requested privileges. During normal (i.e., nondisaster) times, this information is checked directly with the medical school and specialty board. Clinical competence is verified through letters from individuals acquainted with the physician. For licensed independent practitioners, verification using information from either the American Medical Association Physician Masterfile, the Educational Commission for Foreign Medical Graduates, or the American Osteopathic Association is acceptable. In a disaster situation, based on state and local regulations, physician, PA, and NP credentialing should be streamlined by verifying the individual's current credentials and privileges at his/her home hospital and by obtaining a copy of the relevant medical license and board certifications.
- RNs, LPNs, RTs, Paramedics, EMTs, and all other licensed personnel. Presentation of the individual's current professional license, picture identification (e.g., driver's license), and current CPR card, if available, is typically sufficient verification to practice in most states.

6. CONCLUSION

The care of presenting casualties and worried well, along with medical prophylaxis, vaccination, treatment, and information, form the backbone of an effective response to a bioterrorist attack. A mass casualty care system was developed to cope with the high numbers of casualties and worried well (asymptomatic or psychosomatic cases). One critical component of this system involves opening ACCs to expand the capabilities of existing hospitals to provide inpatient medical care. ACCs are flexible, modular units that operate in concert with hospitals and NEHCs. They can be expanded or contracted in a modular fashion to provide a flexible mechanism for an effective medical response to the consequences associated with a bioterrorist attack, regardless of scope. Given the low likelihood/high consequence of a bioterrorist event, it is important to understand that this approach is flexible and adaptable to other major public health events.

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GLOSSARY OF ACRONYMS

ACC	Acute Care Center
ACLS	Advanced Cardiac Life Support
ADL	Activities of Daily Living
ALS	Advanced Life Support
APIC	Association for Professionals in Infection Control and Epidemiology, Inc.
ATLS	Advanced Trauma Life Support
BLS	Basic Life Support
BW	Biological Warfare
BW IRP	Biological Weapons Improved Response Program
CDC	Centers for Disease Control and Prevention
CISM	Critical Incident Stress Management
CPR	Cardio-Pulmonary Resuscitation
CRU	Casualty Relocation Unit
CS	Communication Section
DMAT	Disaster Medical Assistance Team
DP	Domestic Preparedness
ED	Emergency Department
EMS	Emergency Medical System
EMT	Emergency Medical Technician
EMTALA	Emergency Medical Treatment and Active Labor Act
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ESF # 8	Emergency Support Function # 8
FRP	Federal Response Plan
FTE	Full-time Equivalent
HEICS	Hospital Emergency Incident Command System
I/O	Input/Output
ICS	Incident Command System
ICU	Intensive Care Unit
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
LPN	Licensed Practical Nurse
MCC	Medical Command Center
MEMS	Modular Emergency Medical System
NA	Nursing Assistant
NALS	Neonatal Advanced Life Support
NEHC	Neighborhood Emergency Help Center

OEM	Office of Emergency Management
NP	Nurse Practitioner
PA	Physician Assistant
PALS	Pediatric Advanced Life Support
PCC	Patient Care Coordinator
PIO	Public Information Office
POC	Point of Contact
PPE	Personal Protective Equipment
RN	Registered Nurse
RT	Respiratory Therapist
SBCCOM	Soldier and Biological Chemical Command
UPS	Uninterruptible Power Supply
WMD	Weapons of Mass Destruction

APPENDIX A
Sample Admission Orders (Template for Admission Orders)

Patient Name/Stamp _____
Date _____

Sample Admission Orders (Template for Admission Orders)

1. Antibiotic: Cipro 500 mg po bid Pediatric Dose:
 Other:
 Doxycycline 100 mg po bid Pediatric Dose:
2. Allergies: Doxy (TCN) Cipro PCN (penicillin) MSO4
 Phenergan Sulfa Iodine/Contrast Dye Other:
3. IVF: 0.9% Normal Saline D₅W .45% NS
 rate = ____ cc/hr Saline lock
4. IVF Bolus (Pediatric dose: 20cc/kg) : 250 cc/hr 500 cc/hr 1000 cc/hr
 other _____
5. Oral Rehydration: 100 cc/hr 200 cc/hr 500 cc/hr other _____ (may be administered per family or volunteer)
6. Oxygen: ____ liters/minute via nasal cannula OR ____ % via facemask
7. Diet: Regular Diabetic Fluids Other:
8. Vital signs per routine
9. Routine I&O
10. Foley catheter PRN if no urine output in four (4) hours. Discontinue PRN. Once discontinued, if patient does not void in 8 hrs, replace Foley catheter and notify MD.
11. Routine home medications (if provided by patient or family).

12. Acetaminophen: ADULTS = 1000 mg PO q4h PRN for temp >101.5 or pain
PEDIATRICS = ____ ml q4h PRN (15 mg/kg/dose; 160 mg/5 ml)

(Note: a 70 lb child = 32 kg x 15 mg = 480 mg = 3 tsp or 15 ml)

13. Phenergan: ADULTS = 12.5–25 mg IM/IV/PR q6h PRN
PEDIATRICS = ____ mg IM/IV/PR q6h PRN (0.25–0.5 mg/kg/dose)

14. Albuterol: MDI with spacer: 2–4 puffs q2–4h PRN
OR Nebulized unit dose q2h PRN
15. Diphenhydramine (Benadryl): ADULTS = 25–50 mg IV/IM/PO q6h PRN
PEDIATRICS = ___mg IV/IM/PO q6h PRN (1 mg/kg/dose)
16. Lorazepam (Ativan): ADULTS = 1–2 mg IV/IM q6h PRN
PEDIATRICS = ___mg IV/IM q6h PRN (0.05 mg/kg/dose)
17. Morphine Sulfate (titrate to effect): ADULTS = 2 mg IV/IM/SC q5 min PRN (max. dose: 15 mg in 4h)
PEDIATRICS = 0.1 mg/kg/dose IV/IM/SC q5min PRN (max. dose: 10 mg in 6h)
18. Naloxone (Narcan): ADULTS = 2 mg IV q2min PRN (weight >20 kg)
PEDIATRICS = ___mg IV q2min PRN (weight < 20 kg: 0.1 mg/kg/dose)
19. Other:
- Aspirin: 325 mg Other: _____ po qday
 - Nitroglycerin: 0.4 mg 1 tablet SL q5min PRN (if SBP> or = 90 mm Hg) until chest pain-free or ___ tablets given
 - Insulin: Regular ___u SQ qAM NPH___u SQ qAM
 Regular ___u SQ qPM NPH___u SQ qPM
 Insulin 70/30 ___u SQ qAM Insulin 70/30 ___u SQ qPM
 - Furosemide (Lasix): 20 mg 40 mg 60 mg 80 mg Other: _____
PO/IV qday or BID
 - Digoxin (Lanoxin): Maintenance = 0.125 mg 0.25 mg Other: qday PO
Loading = 0.5 mg PO one dose only now; Other: _____
follow with 0.125 mg 0.25 mg PO Other: one time 8 h later
20. Labs (if available): CBC UA BMP (aka Chem 7) Dig level Other: _____
21. X-rays (if available): CXR
22. Social services for discharge planning
23. Victim Assistance Referral

MD Signature: _____
RN Signature: _____

APPENDIX B
ACC Functional Components

APPENDIX B: ACC Functional Components

B.1 ACC OPERATIONS CENTER

The ACC Administrator has responsibility for the entire facility. The following sections are the main components of the ACC:

- Communications Section
- Security/Safety Section
- Community Liaison Section
- Records/Planning Section
- Medical Operations Section
- Supply/Logistics Section
- Finance Section

The sections above are further divided into the following subsections of areas or units:

- Records/Planning Section
 - Admissions/Registration
 - Labor Pool
 - Internal Patient Transportation
- Medical Operations Section
 - Nursing Subunits
 - Family Services
 - Pharmacy Services
 - Temporary Morgue
- Supply/Logistics Section
 - Maintenance
 - Materials/Supply
 - Resource Transportation
 - Food Service
 - Housekeeping

- Finance Section
 - Cost accounting
 - Time (not discussed in detail)
 - Procurement (not discussed in detail)

B.1.1 Job Description

B.1.1.1 ACC Administrator

- a. **Qualifications.** This position of authority must be a healthcare administrator, nurse, or physician executive with knowledge and expertise in hospital operations.
- b. **Duties.** The ACC Administrator is responsible for supervising all ACC activities and supporting the hospital and the community emergency planners in the proper execution of the ACC plan. Added responsibilities include executing all policies and procedures. This individual exercises command and control of the ACC and is responsible for the flow of information out of the ACC.

B.1.2 Job Action Sheets

Disaster situations are unpredictable and extremely variable. Staff turnover, excitement, anxiety, and feelings of urgency or haste can confuse even experienced personnel. Roles are easily forgotten or confused in the urgency of the situation. There will be no time to read a manual, and on-the-spot training will be necessarily short. Job Action Sheets, a simple method for assigning and identifying roles and responsibilities for all personnel, are job description checklists outlining critical activities. Job Action Sheets augment the situation-specific training. These sheets clearly outline what individual staff members are to do, when they are to do it, and to whom they will report. Individuals staffing the ACC must know what is expected of them and understand that there is an organized plan to assist them. Each staff member should be issued a Job Action Sheet as soon as possible, and an administrative individual or his/her designee should review this Job Action Sheet with that individual. Recommended Job Action Sheets for key ACC positions can be found in Appendix D.

B.2 COMMUNICATIONS SECTION (CS)

B.2.1 Function

The function of the Communications Section is to provide command and administrative functions within the ACC and to communicate and coordinate with the city's Emergency Operations Center (EOC).

B.2.2 Staffing/Organization

The Communications Section will be the primary location of the ACC Administrator. All command and administrative functions should be controlled and coordinated out of the CS. The primary communications system will be located within the CS under the direction of the Communications Director. All external communications, reporting, and patient tracking will be accomplished via the Communications Director. Additionally, the Casualty Relocation Unit (CRU) may maintain a communications area within the CS. Two people, the director and a communications specialist, will staff the communications section each shift.

B.2.3 Section Training

All CS staff members must receive ramp-up/extemporaneous training before the opening of the ACC. This training should include, at a minimum, the following information:

- Operational considerations of the city emergency management operations
- Communication channels, both internal and external
- Responsibilities to the supporting hospital
- Organizational structure
- Interdisciplinary workflow
- Financial considerations relative to the emergency event

B.2.4 Job Descriptions

B.2.4.1 Communications Director

a. **Qualifications.** This director should have some knowledge of emergency operations, including the knowledge required to set up voice and data networks internally and externally.

b. **Duties.** The Communications Director is responsible for setting up all communications within the ACC, beginning with the CS. Responsibilities include establishing external communications with emphasis on the community's EOC, supporting hospital Medical Command Center (MCC), and the Casualty Relocation Unit (CRU). This individual is also

responsible for setting up the physical command center and serving as the POC in the absence of the ACC Administrator.

A communications specialist assists the Communications Director.

B.2.4.2 Communications Specialist

a. **Qualifications.** A person filling this role should be a high school graduate with a background in emergency medical operations. This position can be aligned with either the city's emergency planning department or the supporting hospital. The communications specialist should be knowledgeable in emergency operations and communications. Some knowledge of medical facility security is important, and skills such as emergency treatment and/or Basic Life Support (BLS) would be desirable.

b. **Duties.** The specialist is responsible for establishing and maintaining a log of all communications into and out of the ACC. This individual will be the "eyes" and "ears" of the ACC Administrator and will facilitate all required reports to and from the MCC and the community's EOC, and will facilitate communications with the CRU and the supporting hospital. Additionally, this individual will maintain a status board of all current actions and issues for the ACC Administrator and Communications Director.

B.2.5 Process

The CS is the hub of the administration of the ACC. All information flowing into and out of the ACC is coordinated through the CS. The bed status and patient tracking will be accomplished in the CS area. All problems and issues occurring in the ACC will be forwarded to the CS to be addressed by the appropriate staff person. The CS will maintain an action log of all incoming and outgoing communications, reports, and issues. Periodic status meetings will be held by the ACC Administrator to keep the ACC staff updated on the current state of the emergency situation and to facilitate communications among functional unit directors.

B.2.6 Equipment Requirements

The following list is not comprehensive but rather serves as a starting point when identifying CS equipment requirements:

- Desks, chairs, and other workspace.
- Telephones and telephone lines. Each director should have a separate number. The ACC itself should have at least two separate telephones that are staffed at all times.
- Radio communications with the community's EOC and the MCC of the supporting hospital.
- Status boards, easels, and extra chairs for meetings.
- Electrical capability for computers, fax machines, and communications equipment.

B.2.7 Physical Requirements

This area should be a large room with easy access to the nursing subunits. The CS should be away from the main patient flow area and near enough for the Medical Operations Director and Patient Care Coordinator (PCC) to keep in visual contact with the activity in the nursing subunits. The area requires plenty of electrical capacity to handle the high volume of radio and computer needs of the CS. The designated area for the CS needs to be large enough to seat up to 25 people during meetings.

B.3 SECURITY/SAFETY SECTION

B.3.1 Function

The Security/Safety Section's function is to monitor the safety and security of patients and staff in the ACC. This section will maintain control and issue staff identifications (ID). This section will be responsible for providing, monitoring, and assessing the security needs of the ACC and its patients.

B.3.2 Staffing/Organization

The Security/Safety Section is the central location for all security-related activities. All security personnel will report to the Security/Safety Director and will receive their assignments there. All Security/Safety concerns and activities of the ACC are the responsibility of this section. All communications from this section to external sources will be coordinated with the ACC Administrator and the Community Liaison Director.

B.3.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Operational considerations of the city emergency management operations
- Communication channels, both internal and external
- Responsibilities to the supporting hospital
- Organizational structure
- Interdisciplinary workflow
- Security access policies and procedures including Visitor/Staff ID at entry points

B.3.4 Job Descriptions

B.3.4.1 Security/Safety Director

a. **Qualifications.** This director must be a high school graduate with a background in law enforcement and should be an experienced security officer who is closely aligned with the local police or sheriff's department. This individual must have experience with medical facility security. Skills such as emergency treatment and/or basic life support (BLS) would be desirable. Responsibilities include supervising the staff security guards and managing personnel issues. This director ensures the overall safety and security of the ACC. It is essential that this

individual have the ability to work under pressure and manage stressful situations in a manner designed to de-escalate intensity.

b. **Duties.** This director is responsible for maintaining the security of the ACC building and personnel, issuing staff ID badges, and controlling access to the building (security personnel at all access points, pharmacy, medical supply, temporary morgue, and periodic patrol of parking lots). Additional responsibilities include the maintenance and security of evidence until proper authorities are notified and receive the evidence. This individual maintains close communications with the city EOC and law enforcement agencies. The Security/Safety Director should assist the ACC Administrator in updating the current status of any emergency incident outside the ACC.

The Security/Safety Director will provide direction to all security guards stationed throughout the ACC.

B.3.4.2 Security Guard

a. **Qualifications.** This guard must be a high school graduate with a background in law enforcement. Ideally, this individual should be an experienced security officer who is closely aligned with the local police or sheriff's department. This individual should have some knowledge of medical facility security. Skills such as emergency treatment and/or BLS would be desirable.

b. **Duties.** The Security Guard is responsible for the security of the ACC building and personnel. Added responsibilities include issuing staff ID badges and controlling access to the building (security personnel at all access points, pharmacy, medical supply, temporary morgue, and periodic patrol of parking lots). Additionally, the guard is responsible for maintaining security of evidence until proper authorities are notified and receive the evidence. Another important function is to secure patients' personal belongings upon admission and retrieve them upon discharge. If a patient dies, it is the responsibility of the Security Guard to turn over personal belongings to the next of kin if available, in accordance with ACC policy.

B.3.5 Process

All security guards will receive direction and assignment from the Security/Safety Director. Optimally, a security guard will be posted at every ACC entry point as well as in potentially high risk areas, such as the pharmacy. Security guards are responsible for checking the IDs of all persons entering the facility, responding to internal requests for security assistance, and patrolling the premises and perimeter to ensure the safety of the patients and staff.

B.3.6 Equipment Requirements

The following list is not comprehensive but rather serves as a starting point when identifying Security/Safety equipment needs:

- Two-way radios or other internal communications

- Appropriate security gear, flashlights, and possibly handcuffs as specified by the Security/Safety Director.
- Table, chair, and telephone at entry points

B.3.7 Physical Requirements

The Security/Safety Director requires space in the same general area as the ACC Administrator, Communications Director, and Community Liaison Director. A desk and chair or other large workspace may suffice. Most personnel in this section will be assigned to work throughout the ACC; therefore, they will not require significant physical space.

B.4 COMMUNITY LIAISON SECTION

B.4.1 Function

The Community Liaison Section is responsible for being the ACC's interface with volunteer organizations, accepting donations, public relations, and media communication and is under direction of the Community Liaison Director. The community liaison section will work closely with the MEMS' PIO to release information to the media and general public. As the ACC functions in the concept of the MEMS, it will be the PIO at the MEMS that will normally speak to the media on behalf of the ACC and the MEMS as a whole. This section will maximize communication with the general public, media, and the city's EOC.

B.4.2 Staffing/Organization

The Community Liaison Section should be located near the ACC Administrator, Security/Safety Section, and Communications Section. Depending on the nature of the incident, this section may consist solely of the Community Liaison Director. In many incidents, the director may have one or more assistants depending on his/her needs. The Community Liaison Director will work closely with the ACC Administrator, Communications Director, and Security/Safety Director, as well as the community's OEM and the MCC to ensure that timely and accurate information and updates are disseminated to the public through all available means.

B.4.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the opening of the ACC. This training should include, at a minimum, the following information:

- Operational considerations of the city emergency management operations
- Communication channels, both internal and external
- Responsibilities to the supporting hospital
- Organizational structure
- Interdisciplinary workflow
- Who the community public information officer is (from the OEM or other local responsible agency)
- Local media points of contact (TV, radio, Internet)

B.4.4 Job Descriptions

B.4.4.1 Community Liaison Director

a. **Qualifications.** This individual should have experience as a public information officer and must have superior communication and interpersonal relations skills. The functions of this director should be aligned with the city public relations department, the PIO at the MEMS, the emergency management operations, and the supporting hospital.

b. **Duties.** An essential function of this director is to interface with other local support agencies to obtain additional resources. The director must also establish contact with liaison counterparts of all cooperating agencies. This individual must function as a community representative and point of contact (POC). Coordination of ACC activities with the supporting hospital and neighborhood emergency help center (NEHC) is essential. Additional responsibilities include providing the Modular Emergency Medical System (MEMS) public information officer with all necessary casualty data, progress reports, and labor pool requests that will be released to the media. This director also coordinates information provided to the local community as approved by the MEMS.

The Community Liaison Director will perform job responsibilities with the help of a liaison assistant(s).

B.4.4.2 Liaison Assistant

a. **Qualifications.** This assistant must be a high school graduate with a background in public relations and media relations. Ideally, job responsibilities can be aligned with either the city's public relations department, the city's emergency planning department, or the supporting hospital.

b. **Duties.** This individual is responsible for coordinating with the city and supporting the hospitals' public relations departments to ensure that accurate and appropriate information is released to the public. It is important that this assistant be completely conversant on all activities in the ACC that might be newsworthy and provide information to the appropriate people.

B.4.5 Process

All outside (external) information requests should be directed to the Community Liaison Director, who will determine the appropriate response. The director will work closely with the PIO at the MEMS and at other organizations/agencies involved in the response to ensure that a consistent message is provided to the public. This section will also work in collaboration with the Community Outreach module of the MEMS. Normally, the PIO at the MEMS will speak to the media on behalf of the ACC.

B.4.6 Equipment Requirements

The following list is not comprehensive but rather serves as a starting point when identifying Community Liaison equipment needs.

- Telephone and desk or other workspace
- TV, radio
- Computer with Internet connection

B.4.7 Physical Requirements

The Community Liaison Director, and his liaison assistant require space in the same general area as the ACC Administrator, Communications Director, and the Security/Safety Director. A desk and chair or other large workspace may suffice.

B.5 RECORDS/PLANNING SECTION

This section works very closely with the ACC Administrator to ensure that patient and personnel status is kept up to date. Led by the Records/Planning Director, this section consists of three functional units: Admissions/Registration, Labor Pool, and Internal Patient Transportation.

Records/Planning Director

- a. **Qualifications.** This director should be an experienced patient records administrator with expertise in maintaining patient records and patient tracking.
- b. **Duties.** The director is responsible for status reporting, patient admission and tracking, internal patient transportation, and the labor pool.

B.5.1 Admissions/Registration

B.5.1.1 Function

The functions of the Admissions/Registration area are as follows:

- Rapidly admit patients as they enter the ACC
- Assign them to a treatment area
- Initiate the ACC medical records process
- Continuously monitor and report bed availability within the ACC
- Coordinate patient transfer both in and out of the ACC.

B.5.1.2 Staffing/Organization

The Admissions/Registration area is the responsibility of the Records/Planning Director. The Patient Care Coordinator (PCC), although assigned to the Medical Operations Section, will be responsible for quickly assessing each patient and assigning the patient to a nursing pod upon arrival at the ACC. One clerical supervisor and four clerks are required within the area to conduct registration interviews, collate medical records, and print ID labels when the PCC or Medical Operations Director has assigned the patient. Initially, two clerks are sufficient to open an ACC. As more pods are opened, more clerks are added until all four clerks, plus the supervisor, are fully operational. If volunteers are available, they can assist the PCC with patient transfer. The volunteers can also be responsible for maintaining communications with the various nursing pods and updating the bed availability chart. This area should also include at least one security officer posted at all entrances. The responsibilities of the security officer are outlined in the Security/Safety Section.

B.5.1.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Individual workstation process
- Patient arrival process and coordination
- Handling of the medical record
- Management of onsite patient emergencies
- Material support
- Information sources
- Communication channels

B.5.1.4 Job Description

B.5.1.4.1 Admissions Clerk

a. **Qualifications.** The Admissions Clerk should have experience within the supporting hospital and have knowledge in admitting paperwork and regulations. The clerk designated as the supervisor should have some clerical supervisory experience in a healthcare setting.

b. **Duties.** The Admissions Clerk will maintain the admissions control register. Additional responsibilities include initiating the inpatient record using the incoming paperwork and combining it with predefined ACC paperwork. This process will produce a medical record that will accompany the patient to a nursing pod. The clerk will also issue the patient ID labels. An important job responsibility is the continual communication with the Communications Director regarding patient tracking and all admissions.

B.5.1.5 Process and Patient Flow

Patients arrive at the ACC from the NEHC or hospital emergency department (ED) and are immediately assessed for appropriate bed placement by a PCC or physician. The PCC assigns the patient to an appropriate nursing subunit based on previously established facility protocols. Should a patient need invasive or critical care, he or she will be transferred to the hospital, as hospital bed space is available. Following the initial assessment, a transportation clerk or area volunteer (if available) coordinates with Internal Patient Transportation services to move patients to their assigned nursing subunit. Concurrently, an admissions clerk gathers information for the logbook, adds the admissions paperwork to the patient's file, and issues the patient an ID bracelet. This activity may need to be continued in the nursing subunit as space allows to prevent bottlenecks in the admissions area.

B.5.1.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC admissions/registration area equipment requirements:

- Desk/chairs
- Writing implements
- Blank patient records
- Admissions control register (automated when possible)
- Patient ID labels or wrist bands
- Wheeled stretchers
- Wheelchairs

Appendix E, Medical Equipment List, provides a more comprehensive listing of necessary supplies.

B.5.1.7 Physical Requirements

The entrance must have a well-marked door leading to a large processing area. A multipurpose family/visitor area situated in close proximity to the main entrance should be used for family members accompanying patients. The ACC should have only one patient entrance that is separate from the staff and administrative entrances. This separation facilitates site security and control. The Admissions/Registration staff must be provided a means to communicate externally (such as phones, radios, or email, etc.) with the supporting hospitals, NEHCs, and patient transportation units. The staff must also have the ability to communicate internally (such as phones or a public address system) with all ACC patient care areas and internal transportation services.

B.5.2 Labor Pool

B.5.2.1 Function

The function of the Labor Pool is to work with all areas of the ACC in the procurement, assignment, evaluation, and support of staff. Accurate records and evaluation of performance are especially important and enable the operations of the ACC to progress in a manner consistent with the goals of the operation.

B.5.2.2 Staffing/Organization

The Labor Pool will operate under the direction of the Records/Planning Director. The Labor Pool Unit Leader is expected to work with area facilities, schools, public agencies, the general public, and any mutual aid organizations/facilities as part of the personnel procurement process.

Records will be kept to identify personnel needs and personnel provided to any area. These records will be provided to the Financial Section as part of the cost accounting system. Unit leaders will contact the Labor Pool to request staff assistance, whether it be professional or volunteer assistance. The Labor Pool will work with specific unit leaders to assign personnel according to availability and need. This area has the potential to be extremely active with numerous calls and requests. Consideration must be given to providing supplemental staffing assistance to this unit leader.

B.5.2.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Personnel request processes
- Communication channels
- Operational workflow
- Evaluation of personnel capabilities and unit need
- Infection control
- Personal protective equipment (PPE)
- Cost accounting processes

B.5.2.4 Job Descriptions

B.5.2.4.1 Labor Pool Unit Leader

a. **Qualifications.** This unit leader should be a high school graduate with experience in supplemental staffing. Previous experience as a healthcare recruiter or recruiter in a volunteer-based organization is helpful. This individual must be able to make criteria-based decisions and deal with conflict.

b. **Duties.** The labor pool unit leader will work with all sections of the ACC to identify staffing needs. This individual must be able to identify personnel resources in a variety of settings and work to recruit qualified individuals. An essential element of this individual's job responsibilities will include tracking information relative to the credentialing of all licensed staff. Because the Labor Pool Unit Leader is expected to be busy, he should consider using people who are in the labor pool, waiting for assignments, to assist him by performing routine duties such as answering the phone.

B.5.2.4.2 Admissions Volunteers

- a. **Qualifications.** These individuals must be able to read and write and have no physical limitations.
- b. **Duties.** Admission area volunteers will assist the PCC in moving and directing patients as they enter the ACC and may assist the transporters in moving patients to the nursing subunits (see Internal Patient Transportation, Section B.5.3).

B.5.2.4.3 Nursing Volunteers

- a. **Qualifications.** Nursing area volunteers must be able to provide a basic level of nonmedical care to patients and must be able to read and write. These individuals must also be calm, poised, and mature, and have the ability to move around easily without physical limitations.
- b. **Duties.** These volunteers deliver requested supplies to the medical practitioners and assist patients and families in activities of daily living (ADL), such as turning, moving, and patient personal hygiene while in the ACC.

B.5.2.4.4 Morgue Volunteers

- a. **Qualifications.** These volunteers must be able to work around human remains, must be mature, responsible, and handle remains with dignity and respect at all times.
- b. **Duties.** The morgue volunteer is responsible for assisting the mortuary clerk with preparing the remains, and assisting the internal transporters in moving, loading, and unloading of remains. The patient's personal belongings should be inventoried on admission and secured at that time. Therefore, upon the death of a patient, personal belongings can be easily returned to the next of kin, without interfering in the procedures for the disposition of remains.

B.5.2.4.5 Transportation Volunteers

- a. **Qualifications.** These volunteers must be able to physically move patients onto stretchers or wheelchairs and push them for transport. Transporters must become thoroughly familiar with the patient flow pattern and locations for patient distribution.
- b. **Duties.** They must be responsible for moving all nonambulatory patients throughout the ACC and moving deceased patients to the temporary morgue as required. This volunteer is also responsible for notifying appropriate area clerks when a patient has entered the area. Essential responsibilities also include assisting with the loading and unloading of patients from vehicles as needed and ensuring that patient paperwork accompanies all transported patients.

B.5.2.4.6 Supply Volunteers

- a. **Qualifications.** These volunteers must be able to read, lift, and carry.

b. **Duties.** The supply volunteers are responsible for unpacking supplies as they arrive in the ACC and organizing them within the storage area. Added responsibilities may include moving equipment and supplies into the supply area and distributing these items throughout the ACC.

B.5.2.5 Process

Units will submit written or verbal requests for staff, indicating the type of staff needed. The Labor Pool will work with those areas to determine the skill level of the individual needed and attempt to incorporate volunteers into a unit, if indicated and available. The Labor Pool will maintain time records and forward those records to the Finance Section. Communication with the Records/Planning Director will be continual regarding staffing needs and staff procurement.

B.5.2.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying labor pool area equipment requirements:

- Desk/chairs
- Writing implements/paper
- Telephones
- Patient census information (automated if at all possible)
- Copy machine
- Calculators
- Timesheets or other time accounting record

B.5.2.7 Physical Requirements

This unit will require a large room with desks and telephones situated in a manner consistent with handling multiple and simultaneous telephone and personal conversations. This room should be located away from extreme activity to allow communication with outside agencies for personnel procurement. Communication must be established and maintained with the Medical Operations Section in an effort to engage an effective and efficient exchange of information and need.

B.5.3 Internal Patient Transportation

B.5.3.1 Function

The function of the Internal Patient Transportation service is to physically move all nonambulatory patients throughout the ACC and transfer deceased victims to the morgue. This service may include moving patients by wheelchair or stretcher.

B.5.3.2 Staffing/Organization

The Internal Patient Transportation service will be based within or adjacent to the Admissions/Registration area. This unit will be based here to facilitate the movement of arriving patients into the nursing subunits. A clerk and a minimum of six transporters will staff this section. The clerk will handle, process, and coordinate the movement requests from other areas in the ACC while the transporters move the wheelchairs and stretchers.

B.5.3.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Admitting and discharge transportation procedures
- Safe patient transportation
- Facility layout and overview
- Communication channels
- Infection control
- Personal Protective Equipment (PPE)

B.5.3.4 Job Descriptions

B.5.3.4.1 Internal Patient Transportation Unit Leader

a. **Qualifications.** This unit leader should be a high school graduate with experience in a healthcare transportation department. Some supervisory experience is needed to manage personnel and multiple requests for assistance. Experience with body mechanics and personnel safety is also important.

b. **Duties.** This individual will be responsible for personnel and transportation resource management. Directing personnel, managing workload, monitoring equipment, and recordkeeping are essential functions. This individual will work to ensure appropriate staffing, staff utilization, and activity monitoring of transportation personnel.

B.5.3.4.2 Transporter

a. **Qualifications.** The transporter must be able to lift heavy objects and persons. A high school education is preferred, and good interpersonal skills are beneficial. This individual must be able to take direction in a constructive manner.

b. **Duties.** This individual is responsible for transporting patients from the Admissions/Registration area to the assigned bed, transporting or accompanying patients being discharged to the discharge portion of the Admissions/Registration area or to security to retrieve personal belongings, and then transporting them to their vehicle, if available. This transporter may be asked to move supplies, pass patient food, and perform other similar acts associated with “runners.”

B.5.3.4.3 Transportation Clerk

a. **Qualifications.** The clerk must have at least a high school education; some medical office, medical terminology, and recordkeeping experience is preferred. The clerk also needs to have experience in controlling a busy flow area and exhibit good communication skills. Willingness to assist staff in whatever way is needed, including the physical movement of patients, is also necessary.

b. **Duties.** This clerk is responsible for ensuring the smooth flow of all patients throughout the ACC. An essential responsibility includes ensuring that acutely ill patients receive priority transport. Additional responsibilities include answering telephones and maintaining and supervising the volunteers in the internal transportation services. Related duties include coordinating with the CRU staff to assist when a patient requires transfer to the supporting hospital.

B.5.3.5 Process and Patient Flow

This service area will assist in moving all patients within the center. Typically, patients will require movement by wheeled stretcher or wheelchair as they are transferred between patient care areas. The CRU may also request assistance with loading and unloading stretcher-bound patients in the Admissions area.

B.5.3.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC equipment requirements for the internal transportation service area:

- Wheeled stretchers
- Wheelchairs
- Telephone/two-way radios
- Desk and chairs

B.5.3.7 Physical Requirements

This function requires that all ACC patient flow areas allow for stretcher and wheelchair access. Failure to adequately address this issue may greatly hinder the ability of the ACC to provide effective care and increase the staffing requirements for this function.

B.6 MEDICAL OPERATIONS SECTION

This section encompasses all clinical areas of the ACC and consists of four main function units: Nursing Subunits, Pharmacy Services, Family Services, and Temporary Morgue. This section is led by the Medical Operations Director, who is responsible for directing the medical care for every patient entering the ACC.

Medical Operations Director

- a. **Qualifications.** This director should be a physician with at least 5 years of patient care experience. He or she should have inpatient privileges at the supporting hospital. Triage experience is desirable but not necessarily required.
- b. **Duties.** This director will coordinate the flow of patients in and out of the ACC with the assistance of the PCC. Responsibility for all of the clinical care within the ACC falls to this director. The director is also responsible for collaborating with the ACC Administrator and the PCC on all clinical treatment protocols and pharmaceutical dispensing protocols. Additional responsibilities include monitoring the activities of the nursing subunit physicians as well as appointing one as “manager” when the ACC has more than one 250-bed pod active. This director also sets patient discharge policies and consults with nursing subunit physicians on difficult cases, potential discharges, and those still requiring care in the ACC.

Patient Care Coordinator (PCC)

- a. **Qualifications.** The PCC should be an RN with at least 5 years of patient care experience. This person should have “charge nurse” experience with strong leadership skills. The PCC should have triage experience, but this is not required. Emergency department or hospital supervisory experience is a plus.
- b. **Duties.** This individual will be responsible for admissions and will coordinate the flow of patients in and out of the ACC. Additional responsibilities include quick, initial assessment of incoming patients and subsequent nursing pod assignments. The PCC will work closely with the Medical Operations Director in setting clinical, pharmaceutical, and discharge protocols. The PCC will also work with other functional units by assisting them in determining which patients are able to be discharged to home or need to be transported to the hospital for tertiary care. When the ACC opens another 250-bed unit, another PCC might be necessary. For example, each nursing pod will have one of the RNs designated as the charge nurse (or unit leader) on each shift who reports to and works closely with the PCC. When all five nursing pods are full, the PCC will perform rounds on all pods, assisting and consulting as necessary. Therefore, as each 250-bed unit becomes full, another PCC might be required to manage the activities

B.6.1 Nursing Subunits

B.6.1.1 Function

The nursing subunits will support the dual tasks of providing agent-specific inpatient medical care for noncritical patients of bioterrorism-related illness, and a hospice setting that renders

supportive care for terminally ill victims and their families. These units will provide agent-specific patient care interventions and rehabilitation efforts for patients expected to recover and be discharged but requiring inpatient medical interventions.

B.6.1.2 Staffing/Organization

The capacity of each nursing subunit will be established to best meet the needs of the incident. For planning purposes, however, a 50-bed capacity has been selected. Staffing of this area is intended to maintain a feasible patient-to-provider ratio to sustain adequate care. The staff in the nursing subunits is in addition to the Medical Operations Director and the PCC since both of them are responsible for the whole ACC. The staff required *per 12-hour shift* to operate each 50-bed nursing subunit consists of the following:

- One physician
- One physician's assistant (PA) or nurse practitioner (NP)
- Six registered nurses (RNs) or a mix of RNs and licensed practical nurses (LPNs)
- Four nursing assistants/nursing support technicians
- Two medical clerks (unit secretaries)
- Two respiratory therapists (RTs)
- One LPN
- One case manager
- One social worker
- Two housekeepers
- Two patient transporters

Preferably, this area should maintain at least one physician and one physician extender for every 50 patients per shift. Medical personnel in this area will determine if they want to utilize volunteer staff and family members to provide activities of daily living (ADL) and general patient care. Nurses assigned to this unit are responsible for all nursing care provided. However, they may only be able to administer medications while the nonlicensed personnel may have to render all direct patient care. If time allows, family members should be taught how to provide patient treatment modalities that might be needed at home following discharge. The medical clerks are responsible for managing the administrative support functions, such as answering telephones and maintaining the bed status and patient tracking logs. The social worker and case manager provide psychosocial help for families. This individual assists with patient education, religious needs, discharge planning, and various other issues involving dependent patients (children, orphans, elderly). The social worker or case manager also helps to provide general

victim assistance, such as arranging transportation for patients discharging to home. Additional volunteers may be relied upon to perform duties such as assisting with food delivery, moving patients, and retrieving and restocking area supplies.

B.6.1.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the opening of the ACC. This training should include, at a minimum, the following information:

- Admitting procedures
- Initial and ongoing assessment processes
- Communication channels
- Interdisciplinary workflow
- Infection control
- Personal Protection Equipment (PPE)

B.6.1.4 Job Descriptions

B.6.1.4.1 Physician/Physicians Assistant/Family Nurse Practitioner

a. **Qualifications.** Medical or osteopathic degree with residency training (2 years beyond postgraduate) required for physicians. PAs and NPs must have completed the required education and passed the appropriate licensure examination. Pediatric experience is strongly suggested if caring for children.

b. **Duties.** The physicians, PAs, and NPs are responsible for all medical care provided. This includes the evaluation, diagnosis, treatment, disposition of the patient, and the direction and coordination of all other care provided to the patient. Per pod, one of these persons may be assigned to assist the Medical Operations Director in the administrative aspects of medical care as well as provide oversight of the other physicians.

B.6.1.4.2 Registered Nurse

a. **Qualifications.** Graduation from an appropriate accredited program and current licensure in a U.S. state is required. One year of practical experience and current cardiopulmonary resuscitation (CPR) certification is recommended but not required. Pediatric experience would also be helpful. For placement in a supervisory capacity, this RN should have some staff supervisory experience.

b. **Duties.** These nurses are responsible for the nursing care of all patients, including assessment planning, treatment, and evaluation of response to medical interventions. Additional requirements include assisting physicians in exams, treatment, and procedures. The RN is also

responsible for performing all activities essential for the provision of quality care as well as initial patient contact, screening, and assessment. Provision of patient follow-up instructions, administration of medications, documentation, and the recording of all controlled substances dispensed on a narcotic count sheet are also required functions. The nurse must also document assessment procedures and outcomes on charts as per protocol. It is also required that the nurse be able to abandon traditional concepts of total patient care and accept the disaster protocols for rapid evaluation/distribution of patients; he/she must be able to remain calm in a crisis. Proficient patient assessment skills are essential.

B.6.1.4.3 Nursing Assistant/Nursing Support Technician

a. **Qualifications.** These persons preferably should hold a certificate of training. It is desirable for these individuals to have at least 1 year of patient care experience. Due to the intense physical demands, an individual should be able to lift at least 50 pounds and be able to stay on his or her feet for 11.25 hours of a 12-hour shift.

b. **Duties.** An assistant is responsible for monitoring vital signs, intake and outputs, and assists in activities of daily living. He/she must be able to function in a stressful, fast-paced environment.

B.6.1.4.4 Medical Clerk

a. **Qualifications.** This individual must be a high school graduate, and some medical office training is preferred. A medical clerk must be familiar with medical record keeping and terminology and must have experience in controlling a busy traffic flow area. A calm, poised, mature individual displaying sound judgment is required. This clerk must also be willing to assist staff as necessary.

b. **Duties.** The clerk is responsible for maintaining a casualty disposition log in addition to managing the flow of patients, answering telephones, managing paperwork and supplies for the area, and coordinating patient transportation with internal transportation services.

B.6.1.4.5 Respiratory Therapist

a. **Qualifications.** Must be a licensed RT with preferably 1 year experience.

b. **Duties.** The RT will oversee the pulmonary care of patients who require noninvasive respiratory treatments while in the ACC and will manage the logistics of oxygen delivery, if provided within the ACC.

B.6.1.4.6 Licensed Practical Nurse

a. **Qualifications.** This person must be an LPN with patient care experience and an active license to practice. Adult or pediatric patient care experience is necessary. This individual must be able to take direction and work as part of a team.

b. **Duties.** The LPN will be responsible for direct patient care under the direction of the RN. Collaboration with other providers and functions is essential, and the ability to take initiative relative to the needs of patients and families will be necessary.

B.6.1.4.7 Case Manager

a. **Qualifications.** The case manager can be a RN or social worker. These individuals need to have at least 1 year experience in the clinical setting.

b. **Duties.** This individual will offer victim assistance to patients and ensure that upon discharge patients have the necessary resources to continue their recovery. Cross-coverage with the duties of the social worker may be required.

B.6.1.4.8 Social Worker

a. **Qualifications.** This individual should be a licensed (or licensed clinical) social worker.

b. **Duties.** The social worker is responsible for offering victim assistance to families, orphans, and religious needs, and the like, to patients and families in the ACC. Cross-coverage with the duties of the case manager may be required.

B.6.1.5 Process

Patients arrive at the nursing subunit after transferring directly from Admissions/ Registration. Upon arrival, the medical staff perform an initial assessment of the patient. Standing admission and other orders are initiated. As patients recover, they should be encouraged to be as self-sufficient as possible, which will help prepare them for discharge to home. The nursing staff of this area distribute medications and monitor patient outcome. Nonlicensed nursing staff members provide general nursing care and rehabilitation until patients or their family members continue care. Family members and/or volunteers will be encouraged and trained to assist patients in their ADLs, such as bathing, toileting, dressing, and eating.

A patient's condition may be considered unsalvageable, meaning he/she may require advanced medical care that is not available during this disaster; or they are in the end stage of the disease process. These patients will be provided supportive care to ease pain and suffering. Terminal patients will be provided pain medication and other comfort measures. Medical therapeutic intervention measures may be limited. Family members and other volunteers should be encouraged and trained to assist with hospice program activities. Family members will be allowed at the patient's bedside as feasible. Pastoral and death and dying counseling will be provided to patients and their family members during their time in the ACC. When patients expire, their remains will be transferred to the temporary morgue.

If the patient's condition improves to the point where he or she no longer requires in-patient care (i.e., the patient is able to care for himself/herself without assistance or with limited assistance), or if the patient wishes to return home during a terminal phase, the patient will be processed for discharge to home. If a patient's condition worsens to the point where more intensive care is

required yet that patient is considered salvageable, he or she will be transferred to a hospital as bed space becomes available.

B.6.1.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC equipment requirements for the nursing subunits:

- Fifty patient beds/cots (including appropriate linens)
- Mobile supply, medical, and treatment carts
- Wheelchairs/stretchers
- IV poles
- Paper/pens
- Additional documentation forms
- Housekeeping cart
- Telephones
- Desk and chairs
- Clipboards
- Wash basins
- Patient commodes

Appendix E, Medical Equipment List, provides a more comprehensive listing of necessary supplies.

B.6.1.7 Physical Requirements

This area must not restrict patient care or patient movement activities. The area must be large enough to accommodate 50 patient beds, a nursing station, a procedure area, and adequate storage for equipment, and clean and dirty supplies, as well as the personnel staffing the area.

B.6.2 Pharmacy Services

B.6.2.1 Function

Pharmacy services forecasts, orders, maintains accountability of, dispenses, and stores the pharmaceuticals needed to operate the ACC. This area also provides information to clinicians relative to the pharmaceuticals stocked in the ACC.

B.6.2.2 Staffing/Organization

This area will require a large general-purpose room for receiving and storing bulk pharmaceuticals. The Pharmacy Unit Leader is typically the most senior Pharmacist and will oversee the staff for this area, which will consist of the other Pharmacists and Pharmacy Technicians. The Pharmacist will be responsible for equipping a cart (or other stocking method) for each nursing subunit and keeping it current. The Pharmacy Technician will assist the Pharmacist in preparing the pharmacy carts and will be responsible for transporting the carts from the bulk pharmacy area to the nursing subunits.

B.6.2.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Procurement and dispensing of medications
- Record keeping required for narcotics and other pharmaceuticals
- Communication channels
- Interdisciplinary workflow
- Security and safety
- Infection control
- PPE

B.6.2.4 Job Descriptions

B.6.2.4.1 Pharmacy Unit Leader

a. **Qualifications.** The Pharmacy Unit Leader must be a licensed pharmacist. This individual should have a hospital-based pharmacy background and be experienced in processing bulk drug orders.

b. **Duties.** This person is responsible for ordering, receiving, and dispensing pharmaceuticals to the nursing subunits. Additional responsibilities include creating a pharmaceutical cart resupply system, supervising pharmacy staff, and maintaining the pharmacy stockroom.

B.6.2.4.2 Pharmacist

a. **Qualifications.** This position must be filled by a licensed pharmacist. The Pharmacist should have a hospital-based pharmacy background and be experienced in processing bulk drug orders.

b. **Duties.** The Pharmacist is responsible for receiving and dispensing pharmaceuticals to the nursing subunits, breaking down bulk pharmaceuticals and supervising the delivery to each nursing subunit cart, keeping a pharmaceutical log to account for all dispensed pharmaceuticals, and serving as a resource for the nursing subunits for all dispensing issues.

B.6.2.4.3 Pharmacy Technician

a. **Qualifications.** The Pharmacy Technician must be a high school graduate with advanced training as a pharmacy technician. This individual must be trustworthy because he/she will handle pharmaceuticals.

b. **Duties.** This technician is responsible for helping the pharmacist maintain the pharmacy carts and moving the carts to the nursing subunits. Assisting with the maintenance of the pharmacy log for dispensed pharmaceuticals is an added job responsibility.

B.6.2.5 Process

Pharmaceuticals are delivered to the ACC by various agents/vendors. Upon receipt of the pharmaceuticals, the pharmacy staff unpacks, inventories, and places the pharmaceuticals in their respective storage areas. The Pharmacist prepares or supervises the preparation of a pharmacy cart for each nursing subunit with the appropriate preapproved pharmaceuticals for that nursing subunit. When the system is established, the Pharmacist will be responsible for maintaining every pharmacy cart in the ACC. One method is to have a resupply cart that can be pushed around the ACC and used to resupply the nursing subunit supply carts. The Pharmacy Technician is responsible for notifying the pharmacy unit leader if the supply for a certain pharmaceutical falls below the predetermined stock level. The Pharmacy Technician maintains supply inventory, supply requests, and supply disposition logs for accountability. A list of recommended pharmaceuticals can be found in appendix F.

B.6.2.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC pharmacy services equipment requirements:

- Tables and shelves or cabinets (possibly wheeled storage units) to store pharmaceuticals
- Pharmacy carts that can be locked and secured (one per nursing subunit)
- Chairs and a desk for the clerk
- A telephone/two-way radio
- Writing implements/paper
- Pharmacy area requisition log/inventory sheet

- Refrigerator

B.6.2.7 Physical Requirements

This area requires a room large enough to store the bulk pharmaceuticals needed for a fully functioning ACC. The area should have appropriate accommodations for breaking down the bulk pharmaceuticals and placing them on portable carts. This area should also be close to the nursing subunits yet also close to a building exit, ideally with a loading dock. It also requires secure storage capabilities for narcotics and other pharmaceuticals as necessary.

B.6.3 Family Services

B.6.3.1 Function

If the facility and resources allow, it would be beneficial to provide an area separate from patient care areas where families can go to sit and relax. This multipurpose family/visitor area would help provide human services including counseling for patients, staff, and family members as needed. The primary ACC decision makers should be aware of this issue during the preliminary planning stages. Should services be provided in an area separate from the nursing subunits, the ACC Administrator must be prepared to provide individuals competent in providing assistance with social service needs, victim assistance activities, referral, translator services, and child care needs. Staffing, equipment, and space allocation decisions must be addressed by the ACC Administrator.

B.6.3.2 Staffing/Organization

A licensed social worker or chaplain experienced in critical incident stress management (CISM) could staff this area. Whenever possible, the area could incorporate volunteers to provide assistance to the social worker and to the family members.

B.6.3.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Admitting procedures
- Initial and ongoing assessment processes
- Resource availability and utilization
- Communication channels
- Interdisciplinary workflow
- Infection control

- PPE

B.6.3.4 Physical Requirements

A large, comfortable room would be an ideal location to set up this area. Family area equipment requirements include tables, chairs, a television, and some reading materials.

B.6.4 Temporary Morgue

B.6.4.1 Function

The temporary morgue is responsible for providing initial fatality processing and temporary storage of remains until they are transferred to the appropriate mortuary services. This unit will record personal data of the fatalities, tag the remains, inventory and secure the personal effects (if the personal effects have not already been given to the family), and arrange for transfer.

B.6.4.2 Staffing/Organization

One clerk and one volunteer will staff this area. If more staff is needed, volunteers from internal transportation services or the labor pool may be used to move remains.

B.6.4.3 Section Training

The staff must receive ramp-up/extemporaneous training before the ACC opens. This training shall include, but be not limited to, the following information:

- Proper handling of remains
- Standard (Universal) Precautions, including infection control measures
- Patient confidentiality
- PPE

B.6.4.4 Job Descriptions

B.6.4.4.1 Morgue Unit Leader

a. **Qualifications.** This individual must be a high school graduate and have experience in a pathology department working with remains of the deceased. The ideal candidate has experience working in a healthcare facility pathology department or medical examiner's office in a supervisory capacity.

b. **Duties.** This unit leader will supervise the mortuary clerk and work with the disaster management agencies regarding safe, confidential, and dignified handling of the deceased. Additional responsibilities include the appropriate paper trails and accountability of both remains

and personal effects. This individual is expected to communicate with both internal and external functions in performing these responsibilities.

B.6.4.4.2 Mortuary Clerk

a. **Qualifications.** This individual must be a high school graduate, and some medical office or mortuary training is preferred. Familiarity with medical recordkeeping and terminology is preferred. This individual must be calm, poised, mature, and display sound judgment.

b. **Duties.** The clerk establishes a case file on all individual fatalities, oversees the volunteers who transport the remains, and conducts and documents inventory of personal effects. This individual must ensure that all remains and personal effects, if not already removed, are properly labeled and provided to security. Additional responsibilities include ensuring that each case file and all personal effects accompany the remains during transfer, and that all remains are handled with care and dignity. The clerk must also maintain a fatality disposition log and arrange for transfer of remains. Coordination of the stocking and ordering of supplies for the temporary morgue area also constitute job responsibilities.

B.6.4.5 Process

Deceased individuals are transported to the Temporary Morgue by the internal transportation services. Upon receipt of the remains, the morgue staff meets with the individuals accompanying the deceased to collect personal identification information on the deceased. The information is recorded on the fatality's case file (patient record), and the body is placed into a body bag. The deceased individual's next of kin will be directed to security to retrieve any personal effects. The clerk then contacts the appropriate mortuary service for transfer of the remains. The clerk also maintains a fatality disposition log for accountability.

B.6.4.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC equipment requirements for the Temporary Morgue:

- Body bags or morgue kits
- Tables/chairs
- Writing implements/paper
- Clipboards
- Scissors
- Plastic bags (self-sealing)
- Spine boards

- Roller conveyers
- Hand wash and rinse
- PPE (apron, gloves, masks)
- Cleaning supplies

B.6.4.7 Physical Requirements

This area should be set up away from the public view and patient care areas. The area should also be accessible through an exterior entrance, preferably with an oversized or double doorway. This area can be in another building next to the ACC or in a separate part of the building with adequate lighting and handwashing facilities. A refrigerated 5-ton trailer may serve as the storage area for the remains.

B.7 SUPPLY/LOGISTICS SECTION

This section is responsible for all of the services and support needs of the ACC, including obtaining and maintaining the facility, equipment, and supplies. This section consists of five functional units: Maintenance, Materials Supply, Resource Transportation, Food Service, and Housekeeping. This section is led by the Supply/Logistics Director.

Supply/Logistics Director

- a. **Qualifications.** This director should be an experienced medical logistician with close ties to the supporting hospital. Consideration should be given to engaging an individual from the supporting hospital with knowledge of supply and resource management.
- b. **Duties.** Responsibilities of this position include the initial setup of the ACC, the facility, real property equipment, medical equipment, and all supplies, medical and nonmedical. This individual is also responsible for setting up a transportation section for nonpatient transportation needs. Another important part of this role is coordination of all equipment maintenance, medical and nonmedical. This individual is also responsible for procuring freezer trucks or trailers to act as temporary morgues.

B.7.1 Maintenance

B.7.1.1 Function

The Maintenance unit includes the procurement, tracking, repair, and maintenance of all equipment as well as the maintenance of the ACC physical plant. The types of staff included in this unit will vary in accord with several factors, including location of the ACC, current physical state of the ACC location, use of oxygen in the ACC, and general condition of equipment provided for use in the ACC. This unit is a key element in the Supply/Logistics Section and communication with the Supply/Logistics Director as well as the Medical Operations Director is essential.

B.7.1.2 Staffing/Organization

Staffing for this unit may be very diverse, depending upon those factors listed above. It may be necessary to enlist the assistance of the personnel who normally maintain the facility and an individual expert in sanitation and waste management as well as a biomedical engineer. Maintenance personnel with a broad range of experiences including electrical function; plumbing, heating, ventilation, and air conditioning (HVAC); and construction will be essential for this service.

B.7.1.3 Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- ACC equipment inventory

- Review of the physical plant's current state
- Resource availability and utilization
- Communication channels
- Interdisciplinary workflow
- Infection control
- PPE

B.7.1.4 Job Descriptions

B.7.1.4.1 Maintenance Unit Leader

a. **Qualifications.** The Maintenance Unit Leader should be experienced in maintenance with work experience in a hospital or other large healthcare facility. This individual must be able to supervise others and be a resource on physical plant maintenance and operation. It is essential that this individual also have experience working with hazardous materials and medical/regulated wastes.

b. **Duties.** This individual will be responsible for developing a maintenance and emergency intervention plan for all equipment used within the ACC. Fire and evacuation plans must be developed and communicated to others within the facility. All maintenance personnel will be managed by this unit leader, and close communication with the supporting hospital must be maintained.

B.7.1.5 Process

This unit leader will assist in developing a plan of the ACC layout, will identify the location of all equipment, and develop a working knowledge of that equipment. If biomedical engineering is needed, all calls and requests for equipment maintenance will be forwarded and handled by this unit. Nursing subunits will call this area if equipment is needed and is currently unavailable. The maintenance unit will communicate with the supporting hospital or identified vendors and work with their representatives to acquire equipment.

B.7.1.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying maintenance area equipment requirements:

- Desk/chairs
- Writing implements/paper
- Telephones

- Patient census information (automated if at all possible)
- Cabinets or shelves to hold equipment manuals
- General maintenance tools

B.7.1.7 Physical Requirements

This area should consist of a large room with space to repair and maintain equipment and the physical plant of the ACC. The shop area should be located so that noise emanating from this area does not hinder patient care. Further, dust and debris that may be produced during routine maintenance should be directed by airflow away from the patient care area, doorways, and air intake ducts. This area should also be located near the supply area and the loading dock for ease in equipment transport.

B.7.2 Materials/Supply

B.7.2.1 Function

The Materials/Supply unit is responsible for forecasting, ordering, maintaining accountability of, and storing the supplies and equipment needed to operate the ACC. A Resource Transportation unit will work with the supply section to coordinate the infusions of supplies and equipment into the ACC as part of the Supply/Logistics Section.

B.7.2.2 Staffing/Organization

This unit will require a large general-purpose room for receiving and storing bulk supplies and equipment. The Supply/Logistics Director will oversee the staff for this area, which will consist of a clerk and at least five volunteers. The clerk will oversee the unpacking, organizing, and inventorying of equipment and supplies. The volunteers will carry supplies to the various areas of the ACC in response to requests. During the distribution of supplies, the volunteers will wear PPE similar to the staff working in those areas.

B.7.2.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Procurement and distribution of supplies
- Recordkeeping
- Interdisciplinary workflow
- Safety and security (including the wear of PPE)

B.7.2.4 Job Descriptions

B.7.2.4.1 Materials Supply Unit Leader

- a. **Qualifications.** This unit leader must be a high school graduate with medical supply background and be familiar with medical equipment terminology and recordkeeping. This individual must be trustworthy because duties involve receiving and dispensing supplies and equipment.
- b. **Duties.** This unit leader is responsible for ordering, receiving, and dispensing medical supplies to the nursing subunits. Other job responsibilities include creating a medical cart resupply system, supervising supply clerks, and maintaining the materials supply stock room. Another important function is communicating with the Supply/Logistics Director on all supply issues and operations.

B.7.2.4.2 Supply Clerk

- a. **Qualifications.** This clerk must be a high school graduate and some medical office training is preferred. Familiarity with medical equipment terminology and recordkeeping is also important. This individual must be trustworthy because he/she will handle and dispense supplies and equipment and must be willing to assist staff however necessary.
- b. **Duties.** Job responsibilities include maintaining equipment supply logs and requests as well as distributing materials. Essential functions include ensuring that required supplies and equipment are given to requesting areas as needed. This individual must maintain communication with the materials supply unit leader when supplies are low and need to be reordered.

B.7.2.5 Process

Supplies and equipment are delivered to the ACC by various agents/vendors. A recommended list of supplies can be found in appendix E. Upon receipt of the supplies, the supply staff unpacks, inventories, and places the supplies in their respective storage areas. Pilferable items are adequately secured. The clerks of other functional areas within the ACC are responsible for forecasting and requesting the supplies and equipment for their areas. These requests are submitted to the Supply/Logistics Section in the administrative area. The supply clerk receives the requests and fills them from existing stock. If supply stock is below a predesignated level, the clerk notifies the Supply/Logistics Director, who generates an external supply request. The clerk maintains supply inventory, supply request, and supply disposition logs for accountability. A volunteer delivers supplies to the requesting areas as directed by the clerk. The material flow patterns must not interfere with the patient flow process.

B.7.2.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC Supply/Logistics Section equipment requirements:

- Tables and shelves or cabinets (possibly wheeled storage units) to store supplies
- Carts for distribution of supplies
- Chairs and a desk for the clerk
- A telephone/two-way radio
- Writing implements/paper
- Supply area requisition log and inventory sheet

B.7.2.7 Physical Requirements

This area requires a room large enough to store the stock of equipment and supplies needed for a fully functioning ACC. The area should have appropriate accommodations for clean and sterile supplies. This area should also be removed from the patient flow and preferably close to a building exit, ideally with a loading dock.

B.7.3 Resource Transportation

B.7.3.1 Function

The Resource Transportation unit is responsible for moving all supplies and equipment within the ACC, which may require driving to another facility to pick up supplies and deliver them to the ACC.

B.7.3.2 Staffing/Organization

The Resource Transportation unit will consist of transporters using equipment. It must be anticipated that these individuals will remain in constant motion transporting patients from the admitting area and around the nursing subunit, assisting with discharge home or to the morgue, and acting as a general runner throughout the ACC. To keep track of these transporters, a central dispatch area should be used for all incoming calls and dispatching of transporters.

B.7.3.3 Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Dispatch processes
- Physical layout of the ACC
- Equipment review (wheelchairs, stretchers, backboards)
- Communication channels

- Interdisciplinary workflow
- Infection control
- PPE

B.7.3.4 Job Description

B.7.3.4.1 Transportation Unit Leader

- Qualifications.** This individual must be a high school graduate and have a commercial driver's license. This leader must be trustworthy because he/she will handle supplies and equipment and must be willing to assist staff however necessary.
- Duties.** This individual is responsible for moving patients, equipment and supplies throughout the ACC and for ensuring that all transports are conducted in a safe manner.

B.7.3.4.2 Transporters

- Qualifications.** These individuals must be a high school graduates and some will have a commercial driver's license. They must be trustworthy because they will handle supplies and equipment and must be willing to assist staff however necessary.
- Duties.** These individuals will move patients, equipment and supplies throughout the ACC.

B.7.3.5 Process

Calls will be directed to the transportation dispatch telephone. A transportation staff member will be appointed to act as the dispatcher. Calls will be forwarded to transporters indicating the location of the need, type of assistance required, and equipment needs. The transporter will perform the requested assistance and communicate back to the dispatcher upon completion of the task. Transportation equipment will be maintained and monitored by the transportation unit.

B.7.3.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC equipment requirements for the resource transportation service area:

- Pallets for storage
- Wheeled carts for resource transportation
- Physical supports (i.e., back belts) to assist with body mechanics when lifting heavy objects
- Two-way radios

- Vehicle/Truck

B.7.3.7 Physical Requirements

A central office for the receipt of telephone or radio requests is needed. Because this unit is anticipated to be in constant motion, little space needs to be allocated as a base of operation other than the space for the supplies and materials that are to be transported and the equipment needed to do the transporting.

B.7.4 Food Service

B.7.4.1 Function

To provide food from a location separate from patient care areas to the patients and staff. While the design of the food service section was only based on feeding the patients and staff members, some consideration should be given to feeding or offering meals to visitors or family members.

B.7.4.2 Staffing/Organization

There should be one supervisor, one ordering clerk, and four food handlers per 12-hour shift for each 250-bed pod. The supervisor has overall responsibility for all food service operations. The ordering clerk will receive the number and types of orders from each section and nursing subunit, broken down into meals for patients and meals for staff. The clerk will then order and receive the meals from a preselected catering service. The food service workers will help categorize the meals into sections and deliver to the appropriate nursing subunits and possibly to the individual patients. The food service workers will also be responsible for making rounds of wards to ensure that nursing subunit refrigerators are stocked with a predetermined supply of water, juices, and fruit.

B.7.4.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Handling procedures for food wastes
- Sources of information for receiving and ordering supplies
- Standards for cleaning each area
- How to respond to emergency clean-up requests within the food service area

B.7.4.4 Job Descriptions

B.7.4.4.1 Food Service Unit Leader

- a. **Qualifications.** This supervisor should be at least a high school graduate, and a registered dietician is desirable. This person needs to have extensive experience in hospital food service operations.
- b. **Duties.** Responsibilities include supervising all ACC food service activities. Additional responsibilities include planning and ordering all food service supplies and equipment. Supervisory responsibilities include meeting with the Supply/Logistics Director, the Medical Operations Director, and the PCC on setting policies and procedures for food service operations.

B.7.4.4.2 Ordering Clerk

- a. **Qualifications.** The clerk should have experience in hospital food service operations and especially in the ordering of prepared foods.
- b. **Duties.** Responsibilities include receiving and consolidating food orders from all sections and nursing subunits. When a consolidated order has been placed, this clerk is responsible for notifying the Finance Section of the cost of the order. When food is received from the caterer, this clerk verifies that all items ordered have been received. This clerk also provides assistance to the food service workers in breaking down the order by section and dispensing meals.

B.7.4.4.3 Food Service Worker

- a. **Qualifications.** The food service worker should be a high school graduate and understand hospital food service policies and infection control procedures.
- b. **Duties.** Responsibilities include grouping food according to section and ensuring the food is dispensed to the proper destination, such as a nursing subunit or to an individual patient.

B.7.4.5 Process

This unit has the responsibility of ordering, receiving, and dispensing meals to patients and staff. The food service staff will dispense directly to an individual patient. It may be possible to use volunteers to perform this task as well. Each section will order meals 4 hours in advance from the ordering clerk, and the ordering clerk will compile and place a consolidated order to the predesignated caterer. The caterer should be responsible for delivering the meals to the ACC. The ordering clerk will receive the meals and determine that all meals have been received. The ordering clerk will group the meals by section, and the food service workers will deliver the meals to the patients, using volunteers if available.

B.7.4.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying food service equipment requirements:

- Chair and a desk
- Telephone
- Storage cabinets for storing paper towels, napkins, plastic utensils, and paper dishes
- Several large tables for receiving meals and grouping them by section; plenty of tabletop space to store enough meals to feed all patients and staff

B.7.4.7 Physical Requirements

This area should be a large room away from the main patient flow area and close to an outside door or loading dock to facilitate the receipt of stock.

B.7.5 Housekeeping

B.7.5.1 Function

The function of the Housekeeping unit is to clean and disinfect the ACC.

B.7.5.2 Staffing/Organization

There should be one to two housekeepers per nursing subunit per shift, one housekeeper for the administrative areas, and one housekeeping supervisor to supervise all housekeeping activities and personnel. If so determined, the area will incorporate volunteers to assist the housekeepers.

B.7.5.3 Section Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, but not be limited to, the following:

- Personal protective equipment
- Handling procedures for infectious wastes
- Sources of information for receiving and ordering supplies
- Standards for cleaning each area
- How to respond to emergency cleanup requests from wards
- Safe and appropriate use of germicides and other cleaning supplies

B.7.5.4 Job Descriptions

B.7.5.4.1 Housekeeping Unit Leader

- a. **Qualifications.** This supervisor should be a high school graduate and have extensive experience in hospital housekeeping requirements and regulations.
- b. **Duties.** Responsibilities include supervising all ACC housekeeping activities. This individual is also responsible for planning and ordering all housekeeping supplies and equipment and for setting the ACC housekeeping standards. This supervisor is responsible for scheduling housekeeping services within each ACC area and for issuing housekeeping supplies and equipment to the individual housekeepers. Job responsibilities include training the housekeeping staff on personal protection measures, housekeeping standards for each section, and handling of infectious waste.

B.7.5.4.2 Housekeeper

- a. **Qualifications.** This individual should have experience in hospital housekeeping requirements and regulations.
- b. **Duties.** A housekeeper is responsible for cleanliness and up-keep of his/her assigned area of responsibility. These activities include sweeping, mopping, wiping, cleaning toilets and washbasins, and any other housekeeping tasks that fall within their area. Additional responsibilities include obtaining and replacing housekeeping supplies for their responsible area. The housekeeper is also responsible for disposing of all regular and hospital wastes.

B.7.5.5 Process

Housekeepers will report to the Housekeeping Unit Leader at the beginning of the shift and receive their individual assignment. They will then receive the necessary equipment from the housekeeping supervisor to perform their duties. After assessing the supply needs in their assigned areas (e.g., toilet paper, paper towels), they will then request and receive the necessary supplies from the storage area to restock their assigned areas. They will respond to any emergency cleanup as requested by the ACC staff and will dispose of all regular and medical waste in the approved manner.

B.7.5.6 Storage Area Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC equipment requirements for the housekeeping area:

- Chair and a desk
- Telephone
- Numerous storage cabinets for storing toilet paper, paper towels, brooms, mops, cleaning supplies, regular trash bags, medical waste trash bags, and soap

- Mop buckets, trash cans, vacuum cleaner (if needed), and large receptacles for removing trash and delivering supplies

Appendix E, Medical Equipment List, provides a more comprehensive listing of necessary supplies.

B.7.5.7 Storage Area Physical Requirements

This area should be a large room away from the main patient flow area and close to an outside resupply door. The housekeeping storage area also needs to be in close proximity to the logistical area and may even be combined with the logistical storage area. If it is combined with the logistical storage area, the housekeeping supervisor will need his/her own desk and area to manage the housekeeping staff.

B.8 FINANCE SECTION

The ACC Administrator will determine if there is a need and/or resources available for this section. Under supervision of the Finance Director, this section is divided into three functional areas: Cost Accounting, Time, and Procurement.

Finance Director

- a. **Qualifications.** This director should be experienced in financial management, preferably with accounting experience in a healthcare facility. Experience is needed in cost accounting, financial resources, and resource management.
- b. **Duties.** This director will be responsible for developing a cost accounting plan that will include tracking of expenses and documentation of expenditures relevant to the emergency incident. Data management includes information relative to personnel, supplies, and miscellaneous expenses.

B.8.1 Cost Accounting

B.8.1.1 Function

The function of the Cost Accounting unit is to maintain an accurate accounting of the costs associated with the ACC and its operations. Because the financial burden of this emergency care is anticipated to be high, every effort should be made to quantify those costs for reimbursement and/or impact analysis.

B.8.1.2 Staffing/Organization

The Cost Accounting unit will report to the Finance Director. All activities must be coordinated with the supporting hospital and the financial director at that facility. The scope and magnitude of the ACC Finance Section must be a decision made with the direction and assistance of the supporting hospital.

B.8.1.3 Training

All staff members must receive ramp-up/extemporaneous training before the ACC opens. This training should include, at a minimum, the following information:

- Time and accounting audit trail materials
- Initial and ongoing assessment processes
- Resource availability and utilization
- Communication channels
- Interdisciplinary workflow

B.8.1.4 Job Description

B.8.1.4.1 Cost Accounting Unit Leader

- a. **Qualifications.** This individual should be familiar with healthcare financial operations. Ideally, this individual should have experience in an accounting setting with formal education in this field. This unit leader must be attentive to detail and be comfortable working with numbers.
- b. **Duties.** This individual will be responsible for monitoring personnel work time, costs associated with equipment and supplies, and cost analysis. The depth of financial operation will depend upon the relationship with the supporting hospital.

B.8.1.5 Process

The processes involved in the financial accounting and analysis of the ACC will be dependent upon the wishes of the supporting hospital. That supporting hospital may want to maintain accounting of hours, equipment, supplies, and other costs through itself. The complexity and magnitude of the Financial Section are best decided by that supporting hospital.

B.8.1.6 Equipment Requirements

The following list is not meant to be comprehensive but rather is intended to provide a starting point when identifying ACC Finance Section equipment requirements:

- Tables and shelves or cabinets (possibly wheeled storage units) to store receipts and other paper trails
- Chairs and a desk for the clerk
- A telephone
- Writing implements/paper

B.8.1.7 Physical Requirements

Physical requirements for the Finance Section are dependent upon the scope and magnitude of its responsibilities within the ACC. If the decision is to maintain a Finance Section, workspace must be allocated sufficient to meet the accounting needs. Invoice storage, contact files, and other materials must be safely stored and readily available.

B.8.2 Time

The functional area of time management and time keeping will not be addressed in detail. If it is determined that this functional area is required, it is recommended that the ACC adopt the supporting hospital's methods and policies.

B.8.3 Procurement

The functional area of procurement is not addressed in detail. Most of the activities are incorporated in the Logistics/Supply Section. If it is determined that this functional area is required, it is recommended that the ACC adopt supporting hospital's methods and policies.

APPENDIX C
Oxygen Logistics and Delivery Set-Up

APPENDIX C: Oxygen Logistics and Delivery Set-Up

Some of the patients being treated in the Acute Care Center (ACC) will require oxygen therapy. Providing oxygen to patients may be difficult when the ACC does not have direct access to the hospital's oxygen supply. This may occur if the ACC is located off-site from the main hospital grounds. Under these circumstances, the ACC will need to be engineered to be self-sufficient in oxygen therapy.

One compressed oxygen tank (E-cylinder) is able to support only one patient on low-flow oxygen (2 liters/minute) for 4 to 8 hours. As a result, the number of air tanks required to treat a subunit of 50 patients, 24 hours a day, would prove to be a logistical challenge. Employing bulk liquid oxygen tanks can circumvent this problem.

To provide a readily available supply of oxygen, each 50-bed unit would require at least two liquid oxygen tanks. If each treatment unit were set up in a rectangular fashion, one tank would be situated at the two opposite corners. Oxygen from the tanks would pass through pipes running along the floor, framing the periphery of the rectangular unit. Patient beds located on the outside of the rectangle would be designated for oxygen therapy. A flowmeter would be attached to the piping located at the head of each bed; this flowmeter would regulate the flow or volume of oxygen being provided to each patient.

Small portable liquid oxygen tanks would be used for patients situated on the inside of the rectangular unit. Each of these portable units would provide 166 hours of continuous oxygen for a patient on 2 liters per minute. With appropriate fittings and oxygen tubing, several patients could be provided oxygen from one portable tank. These smaller tanks would be refilled as needed from the larger liquid oxygen tanks located on the unit. See Figure C-1, Oxygen Delivery Set-Up.

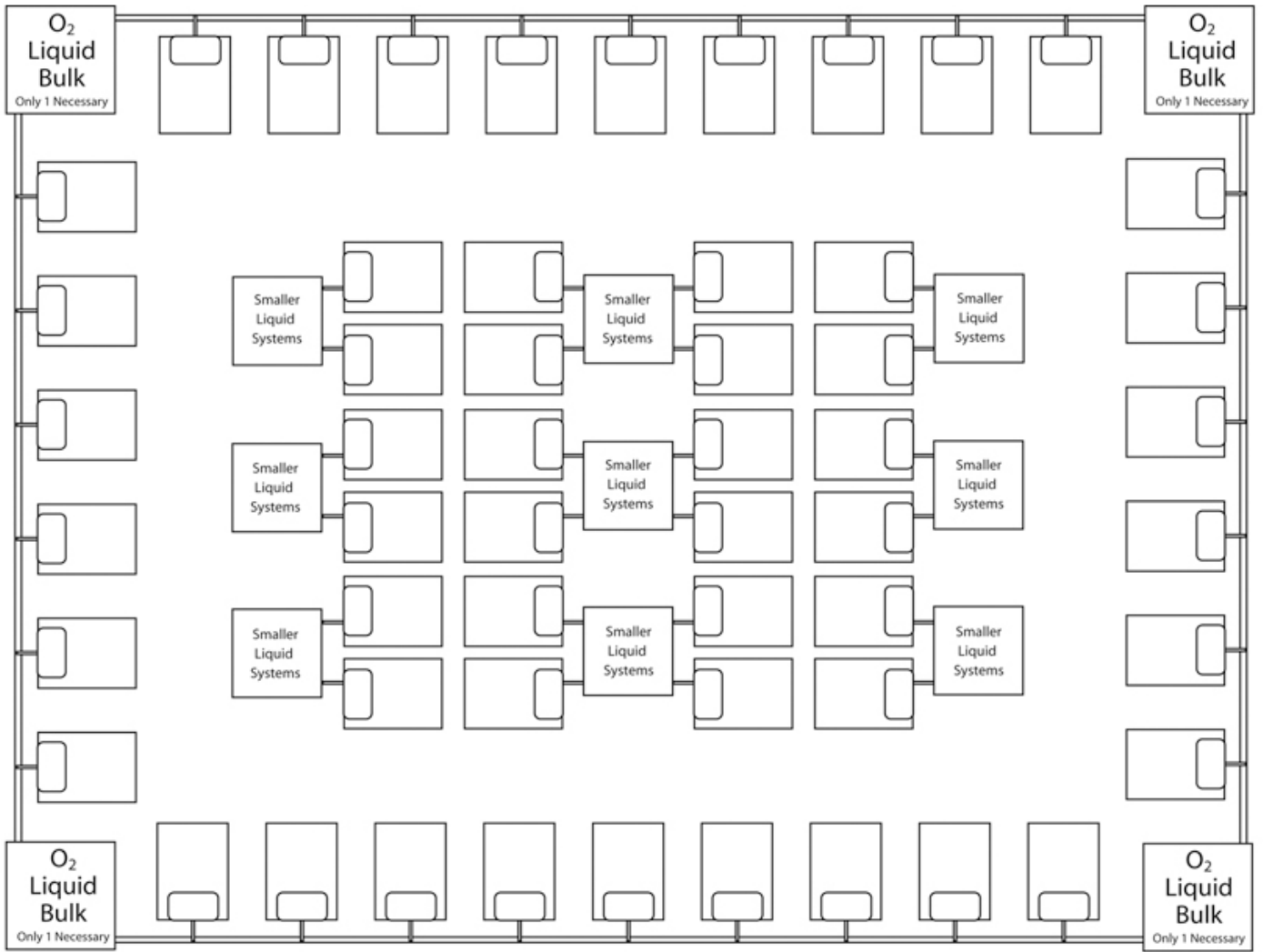


Figure C-1. Oxygen Delivery Set-Up

APPENDIX D
Job Action Sheets

Job Action Sheets

Command Section

ACC ADMINISTRATOR

Mission: Organize and direct the establishment, staffing, and operations of the Acute Care Center (ACC). Manage and supervise the day-to-day operations of the ACC in accordance with predetermined policies.

Immediate

- _____ Initiate the ACC Emergency Incident Command System by assuming role of ACC Administrator.
- _____ Read this entire Job Action Sheet.
- _____ Put on position identification vest.
- _____ Appoint all Section Directors and distribute the section packets that contain the following:
 - Job Action Sheets for each position
 - Identification vest for each position
 - Forms pertinent to section and positions
- _____ Appoint a Communications Director, Community Liaison Director, and Security/Safety Director; distribute Job Action Sheets. (May be pre-established.)
- _____ Meet with all the preselected Section Directors and critical staff. Direct each section chief to establish his/her section according to procedures established in this document and under the direction of the ACC Administrator.
- _____ Establish the ACC Communications Section (CS).
- _____ Establish communications with the community's Emergency Operations Center (EOC), the Casualty Relocation Unit (CRU), and the supporting hospital's Medical Command Center (MCC).
- _____ Assign a Documentation Recorder/Aide.
- _____ Announce a schedule of status/Action Plan meetings of all Section Directors and Unit Leaders.
- _____ Receive status reports and discuss an initial Action Plan with Section Directors and Unit Leaders as the ACC is physically established. Determine appropriate level of service to be provided in the ACC based on planning guidance from the MCC.
- _____ Obtain patient census and status from MCC Planning Section Chief. Emphasize the necessity of proactive actions from the Command Center and the Functional Units within the Planning Section. Call for a hospital-wide projection report for 4, 8, 24, and 48 hours from time of initial opening of the ACC. Adjust projections as necessary.
- _____ Coordinate with the Medical Operations Director to authorize a patient prioritization assessment to allow for designating appropriate early discharge if additional beds are needed.
- _____ Ensure that contact and resource information has been established with outside agencies through the Community Liaison Director.

Intermediate

- _____ Authorize resources as needed or requested by Section Directors.

- _____ Establish routine briefings with Section Directors to receive status reports and update the Action Plan regarding the continuance and termination of the Action Plan.
- _____ Communicate status of the ACC (e.g. bed availability, staffing, etc.) to chairperson of the Hospital Board of Directors and the MCC.
- _____ Consult with Section Directors on needs for staff, physician, and volunteer responder food and shelter. Consider needs for dependents. Authorize plan of action.
- _____ Approve media releases submitted by _____.
- _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- _____ Other concerns:

Extended

COMMUNICATIONS DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Command Center: _____ Telephone: _____

Mission: Organize and coordinate internal and external communications; act as custodian of all logged and documented communications.

Immediate

- ___ Receive appointment from ACC Administrator.
- ___ Read this entire Job Action Sheet and review the organizational chart.
- ___ Put on position identification vest.
- ___ Obtain briefing from ACC Administrator.
- ___ Establish a Communications Center in the Communication Section.
- ___ Assess current status of internal and external telephone systems and report to ACC Administrator.
- ___ Establish a pool of runners and ensure distribution of two-way radios to pre-designated areas.
- ___ Use pre-established message forms to document all communication. Instruct all assistants to do the same.
- ___ Establish contact with Community Liaison Director.
- ___ Receive and hold all documentation related to internal facility communications.
- ___ Monitor and document all communications sent and received via the inter-hospital emergency communication network or other external communication.

Intermediate

- ___ Establish mechanism to alert Code Team and Fire Suppression Team to respond to internal patient and/or physical emergencies (i.e., cardiac arrest, fires, etc).

Extended

- ___ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- ___ Other concerns:

SECURITY/SAFETY DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Command Center: _____ Telephone: _____

Mission: Monitor and have authority over the safety of patients and staff in the ACC. Organize and enforce facility protection and traffic security.

Immediate

- _____ Receive appointment from the ACC Administrator.
- _____ Read this entire Job Action Sheet and review the organizational chart.
- _____ Put on position identification vest.
- _____ Obtain a briefing from the ACC Administrator.
- _____ 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 Communication Section, Admissions Area, patient care units, morgue, and other sensitive or strategic areas from unauthorized access.

Intermediate

- _____ Keep Security and Safety staff alert to identify and report all hazards and unsafe conditions to the Security/Safety Director.
- _____ Secure areas where patients are evacuated to and from, to limit unauthorized personnel access.
- _____ Initiate contact with fire and police agencies through the Community Liaison Director, when necessary.
- _____ Attend assessment meeting with ACC Administrator.
- _____ Advise the ACC Administrator and Section Directors immediately of any unsafe, hazardous, or security-related conditions.
- _____ Assist Labor Pool and patient care area Unit Leaders with the process of credentialing and screening volunteers. Prepare to manage large numbers of potential volunteers.
- _____ Confer with Community Liaison Director to establish areas for media personnel.
- _____ Establish routine briefings with ACC Administrator.
- _____ Provide vehicular and pedestrian traffic control.
- _____ Secure food, water, and medical resources for staff.
- _____ Inform Security/Safety staff to document all actions and observations.

Extended

- _____ Establish routine briefings with Security/Safety staff.
- _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- _____ Other concerns:

COMMUNITY LIAISON DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Command Center: _____ Telephone: _____

Mission: Function as incident contact person for representatives from other agencies.

Immediate

- _____ Receive appointment from the ACC Administrator.
- _____ Read this entire Job Action Sheet and review the organizational chart.
- _____ Put on position identification vest.
- _____ Obtain briefing from ACC Administrator.
- _____ Establish contact with Communications Director in the Communication Section. Obtain one or more aides as necessary from Labor Pool.
- _____ Review county and municipal emergency organizational charts to determine appropriate contacts and message routing. Coordinate with the Communications Director.
- _____ Attend assessment meeting with ACC Administrator.
- _____ Obtain information to provide the interhospital emergency communication network, municipal EOC, and/or county EOC as appropriate, upon request. The following information should be gathered for relay:
 - The number of patients that can be received and treated immediately (patient care capacity) in the ACC.
 - Any current or anticipated shortage of personnel, supplies, etc.
 - Current condition of facility and utilities (ACC's overall status).
 - Number of patients to be transferred by wheelchair or stretcher to the hospital.
 - Any resources requested by other facilities (i.e., staff, equipment, supplies).
- _____ Establish communication with the assistance of the Communications Director with the interhospital emergency communication network, municipal EOC, or with county EOC/County Health Officer. Relay current ACC status.
- _____ Establish contact with liaison counterparts of each assisting and cooperating agency (i.e., municipal EOC). Keep governmental Liaison Officers updated on changes in and development of ACC.

Intermediate

- _____ Request assistance and information as needed through the interhospital emergency communication network or municipal/county EOC.
- _____ Respond to requests and complaints from incident personnel regarding interorganization problems.

Extended

- _____ Prepare to assist Labor Pool Unit Leader with problems encountered in the volunteer credentialing process.
- _____ Relay any special information obtained to appropriate personnel in the receiving facility (i.e., information regarding toxic decontamination or any special emergency conditions).
- _____ Assist the Medical Operations Director and Labor Pool Unit Leader in soliciting physicians and other ACC personnel.
- _____ Inventory any material resources that may be sent upon official request.
- _____ Supply casualty data to the appropriate authorities; prepare the following minimum data:
 - Number of casualties received and types of injuries treated
 - Number admitted and number discharged to home or other facilities
 - Number dead
 - Individual casualty data: name or physical description, sex, age, address, seriousness of injury or condition
- _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- _____ Other concerns:

Job Action Sheets

Records/Planning Section

RECORDS/PLANNING DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Records/Planning Command Center: _____ Telephone: _____

Mission: Organize and direct all aspects of Records/Planning Section operations. Ensure the distribution of critical information and data. Compile scenario and resource projections from all section chiefs and effect long-range planning. Document and distribute facility Action Plan.

- Immediate
- _____ Receive appointment from ACC Administrator. Obtain packet containing Section's Job Action Sheets.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Attend briefing with ACC Administrator and other Section Directors.
 - _____ Recruit a documentation aide from the Labor Pool.
 - _____ Brief Unit Leaders after meeting with ACC Administrator.
 - _____ Provide for a Records/Planning Center.
 - _____ Ensure the formulation and documentation of an incident-specific facility Action Plan. Distribute copies to ACC Administrator and all Section Directors.
 - _____ Call for projection reports (Action Plan) from all Unit Leaders and Section Directors for Scenarios 4, 8, 24, and 48 hours from time of facility opening. Adjust time for receiving projection reports as necessary.
 - _____ Appoint individual to document/update status reports from all Section Directors and Unit Leaders for use in decision making and for reference in post-BW evaluation and recovery assistance applications.
- Intermediate
- _____ Obtain briefings and updates as appropriate. Continue to update and distribute the facility Action Plan.
 - _____ Schedule planning meetings to include Records/Planning Unit Leaders. Then brief other Section Directors and the ACC Administrator on continued update of the facility Action Plan.
- Extended
- _____ Continue to receive projected activity reports from Section Directors and Records/Planning Unit Leaders at appropriate intervals.
 - _____ Assure that all requests are routed and documented through the Communications Director.
 - _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

LABOR POOL UNIT LEADER

Position Assigned To:
You Report To: _____ (Records/Planning Director)
Records/Planning Command Center: _____ Telephone: _____

Mission: Collect and inventory available staff and volunteers at a central point. Receive requests and assign available staff as needed. Maintain adequate numbers of both medical and nonmedical personnel. Assist in maintenance of staff morale.

- Immediate
- _____ Receive appointment from Records/Planning Director.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Obtain briefing from the Records/Planning Director.
 - _____ Establish labor pool area and communicate operational status to EOC and all patient care and nonpatient care areas.
 - _____ Inventory the number and classify staff presently available. Use the following classifications and subclassifications for personnel:

I. MEDICAL PERSONNEL

A. Physician (Obtain with assistance of Medical Operations Director)

1. Critical Care
2. General Care
3. Other

B. Nurse

1. Critical Care
2. General Care
3. Other

C. Medical Technicians

1. Patient Care (aides, orderlies, paramedics, EMTs, etc.)
2. Diagnostic

II. NONMEDICAL PERSONNEL

A. Engineering/Maintenance/Materials Management

- B. Housekeeping and Food Services
- C. Business/Financial
- D. Clerks
- E. Volunteers
- F. Communication Personnel
- G. Other

_____ Establish a registration and credentialing desk for volunteers not employed or associated with the corresponding hospital.

_____ Obtain assistance from Security/Safety Director in screening and identifying volunteer staff.

_____ Meet with Nursing Subunit Leaders and all other Section Directors to coordinate long-term staffing needs.

Intermediate

_____ Maintain log of all assignments.

_____ Assist the Communications Director in publishing an informational sheet to be distributed at frequent intervals to update the ACC population.

_____ Maintain a message center in labor pool area.

Extended

_____ Brief Records/Planning Director as frequently as necessary on the status of labor pool numbers and composition.

_____ Develop staff rest and nutritional areas in coordination with Food Service Unit Leader.

_____ Document actions and decisions on a continual basis.

_____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.

_____ Other concerns:

INTERNAL PATIENT TRANSPORTATION UNIT LEADER

Position Assigned To:
You Report To: _____ (Records/Planning Director)
Records/Planning Command Center: _____ Telephone: _____

Mission: Organize and coordinate the transportation of all patients within the ACC.
Arrange for transportation to and from the nursing subunits.

Immediate

- ___ Receive appointment from Records/Planning Director.
- ___ Read this entire Job Action Sheet and review the organizational chart.
- ___ Put on position identification vest.
- ___ Receive briefing from Records/Planning Director.
- ___ Assess patient transportation requirements and needs for personnel and materials; request patient transporters from Labor Pool to assist in gathering of equipment and supplies.
- ___ Establish ambulance off-loading area in cooperation with the Admissions Area Unit Leader.
- ___ Assemble gurneys, litters, wheelchairs, and stretchers in proximity to ambulance off-loading area and admissions area.

Intermediate

- ___ Contact Security/Safety Director on security needs of loading areas.
- ___ Identify transportation needs for ambulatory casualties.

Extended

- ___ Maintain transportation assignment record in the admissions area and nursing subunits.
- ___ Keep Records/Planning Director apprised of status.
- ___ Direct unassigned personnel to Labor Pool.
- ___ Observe and assist any staff members who exhibit signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- ___ Other concerns:

Job Action Sheets

Medical Operations Section

MEDICAL OPERATIONS DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Medical Operations Command Center: _____ Telephone: _____

Mission: Organize and direct the overall delivery of medical care in all areas of the ACC.

- Immediate
- _____ Receive appointment from the ACC Administrator and receive the Job Action Sheets for the Medical Operations Section.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Meet with ACC Administrator and Section Directors for briefing and development of an initial action plan. Establish time for followup meetings.
 - _____ Appoint the Patient Care Coordinator (PCC), the Family Services, Pharmacy and Morgue unit leaders and the Nursing Subunit Supervisors and transfer the corresponding Job Action Sheets.
 - _____ Assist in establishing a Medical Operations Section.
 - _____ Meet with the PCC and Nursing Subunit unit leaders/charge nurses to discuss medical care needs, staffing, and material needs in all patient care areas.
 - _____ Provide medical staff support to assist with patient priority assessment to designate those eligible for early discharge.
 - _____ Establish two-way communication (radio or runner) with Admissions Supervisor and Nursing Subunit Supervisors.
- Intermediate
- _____ Meet regularly with PCC and Nursing Subunit Supervisors to assess current and project future patient care conditions.
 - _____ Brief ACC Administrator routinely on the status/quality of medical care.
- Extended
- _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

PATIENT CARE COORDINATOR

Position Assigned To:
You Report To: _____(Medical Operations Director)
Medical Operations Command Center: _____Telephone: _____

Mission: Sort casualties according to priority of illness and ensure their disposition to the proper patient care area.

Immediate

- ___ Receive appointment from Medical Operations Director.
- ___ Read this entire Job Action Sheet and review the organizational chart.
- ___ Put on position identification vest.
- ___ Receive briefing from Medical Operations Director.
- ___ Establish patient admissions area; consult with Internal Transportation Unit Leader to designate the ambulance off-loading area.
- ___ Ensure sufficient transport equipment and personnel for the admissions area.
- ___ Assess problem, triage-treatment needs relative to specific agent of bioterrorism.
- ___ Assist the Nursing Subunits Supervisors with triage of internal ACC patients, if requested.
- ___ Develop Action Plan and request needed resources from the Medical Operations Director.
- ___ Assign triage teams.

Intermediate

- ___ Identify location of Nursing Subunits immediate, discharge, and morgue areas; coordinate with Unit Supervisors.
- ___ Contact Safety/Security Director of security and traffic flow needs in the admission area. Inform Nursing Subunit Area unit leaders/charge nurses of action.

Extended

- ___ Report emergency care equipment needs to Materials/Supply Unit Leader. Inform Medical Operations Director of action.
- ___ Ensure that the disaster chart and admission forms are used. Request documentation/clerical personnel from Labor Pool if necessary.
- ___ Keep the Medical Operations Director apprised of status.
- ___ Observe and assist any staff members who exhibit signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
- ___ Review and approve the area documenter's recordings of actions/decisions in the admissions area. Send copy to the Medical Operations Director.
- ___ Direct nonutilized personnel to Labor Pool.
- ___ Other concerns:

NURSING SUBUNIT SUPERVISOR

Position Assigned To:
You Report To: _____(Medical Operations Director)
Medical Operations Command Center: _____Telephone: _____

Mission: Ensure treatment of patients and manage the patient care area(s). Provide for a controlled patient discharge.

- Immediate
- ___ Receive appointment from Medical Operations Director and receive Job Action Sheets for the Subunit Leaders.
 - ___ Read this entire Job Action Sheet and review the organizational chart.
 - ___ Put on position identification vest.
 - ___ Receive briefing from Medical Operations Director; develop initial action plan with Medical Operations Director and Patient Care Coordinator.
 - ___ Appoint Unit Leaders for subunits.
 - ___ Distribute corresponding Job Action Sheets, request a documentation aide/assistant for each Unit Leader from Labor Pool.
 - ___ Brief Unit Leaders on current status. Designate time for follow-up meeting.
 - ___ Assist establishment of patient care areas in new locations if necessary.
 - ___ Instruct all Unit Leaders to begin patient priority assessment; designate those eligible for early discharge.
 - ___ Assess problems and treatment needs in each area; coordinate the staffing and supplies for each area to meet needs.
 - ___ Meet with Medical Operations Director to discuss medical care plan of action and staffing in all patient care areas.
 - ___ Receive, coordinate, and forward requests for personnel and supplies to the Labor Pool Unit Leader, Medical Operations Director, and Materials/Supply Unit Leader. Copy all communication to the Communications Director.
- Intermediate
- ___ Contact the Security/Safety Director for any security needs. Advise the Medical Operations Director of any actions/requests.
 - ___ Report equipment needs to Materials/Supply Unit Leader.
 - ___ Establish two-way communication (radio or runner) with Medical Operations Director.
- Extended
- ___ Assess environmental services (housekeeping) needs in all in-patient care areas.
 - ___ Assist Community Liaison Director in obtaining information.
 - ___ Observe and assist any staff members who exhibit signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - ___ Report frequently and routinely to Medical Operations Director to keep him/her apprised of situation.

- _____ Document all action/decisions with a copy sent to the Medical Operations Director.
- _____ Other concerns:

FAMILY SERVICES UNIT LEADER

Position Assigned To:
You Report To: _____ (Medical Operations Director)
Medical Operations Command Center: _____ Telephone: _____

Mission: Ensure the availability of social service needs, victim assistance activities, referral, translator services and child care needs.

- Immediate
- _____ Receive appointment from Medical Operations Director
 - _____ Read this entire Job Action Sheet and review the organizational chart
 - _____ Put on position identification vest
 - _____ Receive briefing from Medical Operations Director with other subsection Unit Leaders; develop a subsection action plan
 - _____ Provide an area separate from patient care areas for family members and visitors to sit and relax
- Intermediate
- _____ Coordinate social service and victim assistance activities
 - _____ Coordinate for translator services
 - _____ Coordinate for child care services
- Extended
- _____ Observe and assist any staff members who exhibit signs of stress, fatigue, or inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

PHARMACY UNIT LEADER

Position Assigned To:
You Report To: _____ (Medical Operations Director)
Medical Operations Command Center: _____ Telephone: _____

Mission: Ensure the availability of emergency, incident-specific, pharmaceutical and pharmacy services.

- Immediate
- _____ Receive appointment from Medical Operations Director.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Receive briefing from Medical Operations Director with other subsection Unit Leaders; develop a subsection action plan.
 - _____ Assign pharmacist to patient care areas, when appropriate.
 - _____ Inventory most commonly used pharmaceutical items and provide for the continual update of this inventory.
 - _____ Identify any inventories that might be transferred upon request to another facility and communicate list to the Medical Operations Director.
- Intermediate
- _____ Communicate with the Materials/Supply Unit Leader to ensure a smooth method of requisitioning and delivery of pharmaceutical inventories within the ACC.
- Extended
- _____ Provide for routine meetings with Medical Operations Director.
 - _____ Review and approve the documenter's recordings of actions/decisions in the pharmacy service area. Send copy to Medical Operations Director.
 - _____ Observe and assist any staff members who exhibit signs of stress, fatigue, or inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

MORGUE UNIT LEADER

Position Assigned To:
You Report To: _____ (Medical Operations Director)
Medical Operations Command Center: _____ Telephone: _____

Mission: Collect and protect deceased patients.

Immediate

- _____ Receive appointment from the Medical Operations Director.
- _____ Read this entire Job Action Sheet and review the organizational chart.
- _____ Put on position identification vest.
- _____ Receive briefing from Medical Operations Director with other Unit Leaders.
- _____ Establish morgue area; coordinate with Nursing Subunit Areas Supervisor and Medical Operations Director.
- _____ Obtain assistance from the Internal Patient Transportation Unit Leader for transporting deceased patients.
- _____ Ensure all transporting devices are removed from under deceased patients and returned to the transportation area.

Intermediate

- _____ Maintain master list of deceased patients with time of arrival for Community Liaison Director.
- _____ Ensure all deceased patients in morgue areas are covered, tagged, and identified where possible.
- _____ Keep patient care areas Unit Leaders apprised of number of deceased.
- _____ Contact the Security/Safety Director for any morgue security needs.

Extended

- _____ Arrange for frequent rest and recovery periods, as well as relief for staff.
- _____ Observe and assist any staff members who exhibit signs of stress, fatigue or inappropriate behavior.
- _____ Review and approve the area documenter's recording of action/decisions in the morgue area. Send copy to the Patient Care Coordinator.
- _____ Direct nonutilized personnel to Labor Pool.
- _____ Other concerns:

Job Action Sheets

Supply/Logistics Section

SUPPLY/LOGISTICS DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Supply/Logistics Command Center: _____ Telephone: _____

Mission: Organize and direct those operations associated with maintenance of the physical environment and adequate levels of food, shelter, and supplies to support the medical objectives.

- Immediate
- _____ Receive appointment from the ACC Administrator. Obtain packet containing Section's Job Action Sheets, identification vests, and forms.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Obtain briefing from ACC Administrator.
 - _____ Brief Unit Leaders on current situation; outline action plan and designate time for next briefing.
 - _____ Establish Logistics Section in proximity to Communications Section (CS).
 - _____ Attend assessment meeting with ACC Administrator.
- Intermediate
- _____ Obtain information and updates regularly from Unit Leaders and Directors; maintain current status of all areas; pass status information to ACC Administrator.
 - _____ Communicate frequently with ACC Administrator.
 - _____ Obtain needed supplies with assistance of the Finance Director, Communications Director, and Community Liaison Director.
- Extended
- _____ Ensure that all communications are copied to the Communications Director.
 - _____ Document actions and decisions on a continual basis.
 - _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

MAINTENANCE UNIT LEADER

Position Assigned To:
You Report To: _____ (Supply/Logistics Director)
Supply/Logistics Command Center: _____ Telephone: _____

Mission: Maintain the integrity of the physical facility to the best level. Provide adequate environmental controls to perform the medical mission.

- Immediate
- _____ Receive appointment from Supply/Logistics Director and Job Action Sheets.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Meet with Supply/Logistics Director to receive briefing and develop Action Plan; deliver preliminary report on the physical status of the facility if available.
 - _____ Provide the Facility System Status Report Form to the ACC Administrator. (May be preestablished.)
 - _____ Receive a comprehensive facility status report as soon as possible from ACC Administrator.
 - _____ Facilitate and participate in damage assessment meeting between ACC Administrator and Supply/Logistics Section Director.
- Intermediate
- _____ Receive continually updated reports from the Command Center.
- Extended
- _____ Forward requests from outside service providers/resources to the Materials Supply Unit Leader after clearing through the Supply/Logistics Section Director.
 - _____ Document actions and decisions on a continual basis. Obtain the assistance of a documentation aide if necessary.
 - _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

MATERIALS/SUPPLY UNIT LEADER

Position Assigned To:
You Report To: _____ (Supply/Logistics Director)
Supply/Logistics Command Center: _____ Telephone: _____

Mission: Organize and supply medical and nonmedical care equipment and supplies.

Immediate

- _____ Receive appointment from Supply/Logistics Director.
- _____ Read this entire Job Action Sheet and review the organizational chart.
- _____ Put on position identification vest.
- _____ Receive briefing from Supply/Logistics Director.
- _____ Meet with and brief Supply Personnel.
- _____ Establish and communicate the operational status of the Materials/Supply Pool to the Supply/Logistics Director.
- _____ Dispatch the predesignated supply carts to the Nursing Subunits once these areas have been established. Enlist the assistance of the Internal Transportation Unit Leader.
- _____ Collect and coordinate essential medical equipment and supplies.
- _____ Develop medical equipment inventory.

Intermediate

- _____ Identify additional equipment and supply needs. Make requests and needs known through Supply/Logistics Director. Gain the assistance of the Finance Section when indicated.
- _____ Determine the anticipated pharmaceuticals needed with the assistance of the Medical Operations Director and Pharmacy Unit Leader to obtain or request items.

Extended

- _____ Coordinate with Security/Safety Director to protect resources.
- _____ Observe and assist staff members who exhibit signs of stress, fatigue, and inappropriate behavior.
- _____ Other concerns:

RESOURCE TRANSPORTATION UNIT LEADER

Position Assigned To:
You Report To: _____(Supply/Logistics Director)
Supply/Logistics Command Center: _____Telephone: _____

Mission: Organize and coordinate the transportation of all equipment and supplies internally and externally to the ACC. Arrange for the transportation of human and material resources to and from the facility.

- Immediate
- ___ Receive appointment from Supply/Logistics Director.
 - ___ Read this entire Job Action Sheet and review the organizational chart.
 - ___ Put on position identification vest.
 - ___ Receive briefing from Supply/Logistics Director.
 - ___ Assess transportation requirements and needs for personnel and materials; request transporters from Labor Pool to assist in gathering equipment and supplies.
- Intermediate
- ___ Contact Safety/Security Director on security needs of loading areas.
 - ___ Provide for the transportation and shipment of resources into and out of the facility.
- Extended
- ___ Keep Supply/Logistics Director apprised of status.
 - ___ Direct unassigned personnel to Labor Pool.
 - ___ Observe and assist any staff member who exhibits signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - ___ Other concerns:

FOOD SERVICE UNIT LEADER

Position Assigned To:
You Report To: _____(Supply/Logistics Director)
Supply/Logistics Command Center: _____Telephone: _____

Mission: Organize food and water stores for staff and patients. Manage preparation of food. Coordinate rationing during periods of anticipated or actual shortage.

Immediate

- ___ Receive appointment from Supply/Logistics Director.
- ___ Read this entire Job Action Sheet and review the organizational chart.
- ___ Put on position identification vest.
- ___ Receive briefing from Supply/Logistics Director.
- ___ Meet with and brief Food Services personnel.
- ___ Estimate the number of meals that can be served using existing food stores; implement rationing if situation dictates.
- ___ Identify an outside catering source and order food to meet the needs of the ACC
- ___ Inventory the current emergency drinking water supply and estimate time when resupply will be necessary. Implement rationing if situation dictates.
- ___ Report inventory levels of emergency drinking water and food stores to Supply/Logistics Director.

Intermediate

- ___ Meet with Labor Pool Unit Leader to discuss location of personnel refreshment and nutritional break areas.
- ___ Secure nutritional and water inventories with the assistance of the Security/Safety Director.
- ___ Submit an anticipated need list of water and food to the Supply/Logistics Director. Request should be based on current information concerning emergency events as well as projected needs for patients, staff, and dependents.

Extended

- ___ Meet with Supply/Logistics Director regularly to keep informed of current status.
- ___ Observe and assist staff members who exhibit signs of stress, fatigue, and inappropriate behavior. Provide for staff rest period and relief.
- ___ Other concerns:

HOUSEKEEPING UNIT LEADER

Position Assigned To:
You Report To: _____ Supply/Logistics Director
Supply/Logistics Command Center: _____ Telephone: _____

Mission: Evaluate and monitor the the cleanliness of the ACC facility.

- Immediate
- _____ Receive appointment and Job Action Sheet from Supply/Logistics Director.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Obtain briefing from Supply/Logistics Director.
 - _____ Inspect the hazardous waste collection areas(s) to ensure patency of containment measures. Lock unsafe areas with assistance of the Security/Safety Director.
 - _____ Control observed hazards, leaks, or contamination with the assistance of the Security/Safety Director.
 - _____ Set up housekeeping supply area.
 - _____ Brief and assign all housekeepers to appropriate areas and ensure housekeepers perform all duties.
- Intermediate
- _____ Implement preestablished alternative waste disposal/collection plan, if necessary.
 - _____ Ensure that all sections and areas of the ACC are informed of the implementation of the Housekeeping Plan.
 - _____ Ensure an adequate number of handwashing areas are operational near patient care and food preparation areas and adjacent to portable toilet facilities.
 - _____ Inform Infection Control personnel of actions and enlist assistance where necessary.
- Extended
- _____ Monitor levels of all supplies, equipment, and needs relevant to all sanitation operations.
 - _____ Brief Supply/Logistics Director routinely on current condition of all sanitation operations; communicate needs in advance.
 - _____ Obtain support staff as necessary from Labor Pool.
 - _____ Observe all staff, volunteers, and patients for signs of stress and inappropriate behavior. Report concerns to the Labor Pool Unit Leader. Provide for staff rest periods and relief.
 - _____ Other concerns:

Job Action Sheets

Finance Section

FINANCE DIRECTOR

Position Assigned To:
You Report To: _____ (ACC Administrator)
Finance Command Center: _____ Telephone: _____

Mission: Monitor the use of financial assets. Oversee the acquisition of supplies and services necessary to carry out the ACC's medical mission. Supervise the documentation of expenditures relevant to the emergency incident.

- Immediate
- ___ Receive appointment from the ACC Administrator. Obtain packet containing Section's Job Action Sheets.
 - ___ Read this entire Job Action Sheet and review the organizational chart.
 - ___ Put on position identification vest.
 - ___ Obtain briefing from ACC Administrator.
 - ___ Appoint any Unit Leaders needed after conferring with the supporting hospital's financial officer. (May be preestablished.)
 - ___ Confer with ACC Administrator; develop a section action plan.
 - ___ Establish a Financial Section Operations Center. Ensure availability of adequate documentation/recording personnel.
- Intermediate
- ___ Approve a "cost-to-date" incident financial status report summarizing financial data relative to personnel, supplies, and miscellaneous expenses.
 - ___ Obtain briefings and updates from the ACC Administrator as appropriate.
 - ___ Relate pertinent financial status reports to appropriate Section Directors and Unit Leaders.
 - ___ Schedule planning meetings to include the ACC Administrator to discuss updating the section's incident action plan and termination procedures.
- Extended
- ___ Assure that all requests for personnel or supplies are copied to the Communications Director in a timely manner.
 - ___ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - ___ Other concerns:

COST ACCOUNTING UNIT LEADER

Position Assigned To:
You Report To: _____(Finance Director)
Finance Command Center: _____ Telephone: _____

Mission: Provide cost analysis data for the declared emergency and the opening and operation of the ACC. Maintain accurate records of incident cost.

- Immediate
- _____ Receive appointment from Finance Director.
 - _____ Read this entire Job Action Sheet and review the organizational chart.
 - _____ Put on position identification vest.
 - _____ Obtain briefing from Finance Director; assist in development of section action plan.
- Intermediate
- _____ Prepare a “cost-to-date” report form for submission to Finance Director once every 8 hours.
 - _____ Inform all Section Directors of pertinent cost data at the direction of the Finance Director.
- Extended
- _____ Prepare a summary of all costs incurred during the declared emergency incident.
 - _____ Observe all staff, volunteers, and patients for signs of stress, fatigue, and inappropriate behavior. Provide for staff rest periods and relief.
 - _____ Other concerns:

APPENDIX E
Medical Equipment List

Item Description	Calculations of Quantities	Total Item Count	Unit Of Issue	Total UOIs Required
All supplies are based on the needs of one (1) 50 bed subunit; two, 12 hour shifts per 24-hour day and approximately 6 staff providing direct patient care per shift.				
IV Supplies (approximately 50% of 25 patients/day estimated to require IVs) 50 pts first day, then 10 new pts/day for 6 remaining days = approx. 110 different pts/wk (88 adults; 22 peds)				
Alcohol pads (multiple widespread use)	2-4 boxes per 24 hrs	14-28 boxes/week	Box	
Catheters, intraosseous module blue (pediatric use)	May use 1/day max. 50 pts initially (first day) then	6-7/wk of 1 standard size	Ea	7
Intermittent IV access device (lock)	10% turnover qday	250/wk	50/Box	5
IV catheters, 18g with protectocath guard	40% of pts req IVs	150/wk	50/Box	3
IV catheters, 20g with protectocath guard	40% of pts req IVs	150/wk	50/Box	3
IV catheters, 22g with protectocath guard	10% of pts req IVs	25/wk	50/Box	0.5
IV catheters, 24g with protectocath guard	10% of pts req IVs	25/wk	50/Box	0.5
IV fluid bags, NS, 1000cc (required by 60% of patients)	(50% of pts(25)/day x 3L/pt) x	315 L/wk	12/case	18 cases
IV fluid bags, D5 1/2NS, 1000cc (required by 40% of patients)	(50% of pts(25)/day x 3L/pt) x	210 L/wk	12/case	18 cases
IV start kits	same # as intermittent access device	60	25/box	2.5 boxes
IV tubing w/ Buretrol drip set for peds	10% peds/wk	25/wk	20 per case	1.25 cases
IV tubing w/ standard macrodrip for adults	same # as intermittent access	250/wk	48/case	5 cases
Needles, Butterfly, 23g	10% peds/wk	25/wk	50/box	0.5 boxes
Needles, Butterfly, 25g	10% peds/wk	25/wk	50/box	0.5 boxes
Needles, sterile 18g	1 box/day	7 boxes/wk	100/box	7 boxes
Needles, sterile 21g	1 box/day	7 boxes/wk	100/box	7 boxes
Needles, sterile 25g	1 box/day	7 boxes/wk	100/box	7 boxes
Saline for injection 10cc bottle	50 bottles/day	350 bottles/wk	24/box	14.5 boxes
Patient Care Supplies				
ABD bandage pads, sterile	10% of pts/day = 5 pads/day = 35 pads/wk	35 pads/wk	16/box	2 boxes
BandAids	1 box/day	7 boxes/wk	50/box	7 boxes
Basins, bath	20 pts/day	140/wk	100/case	1.5 cases
Bathing supply, prepackaged (e.g. Bath in a Bag (1M))	50 pts every day	350/wk		350
Bedpans - regular	40 pts/day initially then 10%	65/wk	50/case	1.25 cases
Blankets	50 pts/day; changed daily	50/day or 350/wk		

Item Description	Calculations of Quantities	Total Item Count	Unit Of Issue	Total UOIs Required
Carafes - 1 liter (for variety of uses)	30/day	210/wk		
Cart, supply	3/sub-unit (1 for IV's; 1 for Pt	3/sub-unit		
Chux protective pads (many uses)	3/pt q3hrs = 24 chux/pt/day x 50 pts = 1200/day	8400/wk	50/box	168 boxes
Cots (have extras available to replace broken equipment)	50/sub-unit plus 2 extra	52/sub-unit		
Curtains, privacy (wheeled)	1 between every bed = 25	25/sub-unit		
Diapers - adult	10/day	70/wk	72/case	1 case
Diapers - infant	8/day/infant x 5 infants/day = 5/day/ped x 5 peds/day =	280/wk	100/case	3 cases
Diapers - pediatric	25/day	175/wk	144/case	1.25 cases
Emesis basins	100/wk	100/wk	250/case	0.5 case
Facial tissue, individual patient box	1 box/pt/day	350 boxes/wk	200 boxes/c	1.75 cases
Feeding tubes, pediatric				
- 5 French	10/wk	10/wk	10/box	1 box
-8 French	10/wk	10/wk	10/box	1 box
Foley Catheters - 16F Kits (includes drainage bag)	>50% of pts/wk	100/wk	10/case	10 cases
Gloves**** non-sterile, large (non latex)	6 boxes/day	42 boxes/wk	100/ box	42 boxes
Gloves**** non-sterile, medium (non latex)	6 boxes/day	42 boxes/wk	100/box	42 boxes
Gloves**** non-sterile, small (non latex)	6 boxes/day	42 boxes/wk	100/box	42 boxes
Goggles, splash resistant, disposable	1 /staff + extras	12/sub-unit	10/box	1.2 boxes
Gown, splash resistant, disposable	3/staff/shift = 36/day	252/wk	Box	
Gown, patient	1/5/day	525/wk		
Guaze pads, non-sterile, 4x4 size, tube size	400/day	2800/wk	Roll	
Hand cleaner, waterless alcohol-based	1 per handwash station/day x 4	28/wk	25 bottles/case	1 case
Lubricant, Water soluble		1-2 boxes/wk	25 boxes/c	0.5 cases
Medicine cups, 30ml, plastic	2/pt/day = 100/day	700/wk		
Morgue Kits	1 ularemia: 15pt/day mortality;	300/wk		
Nasogastric tubes - 18F		25/wk	50/case	0.5 cases
OB Kits		1/wk		
Pen lights		12/unit	6/box	2 boxes/unit
Povidone-iodine bottles, 12 oz	2/day	14/wk	48 bottles/c	0.25 cases
Restraints, Extremity, soft - adult		25/wk	48/case	0.5 cases

Item Description	Calculations of Quantities	Total Item Count	Unit Of Issue	Total UOIs Required
Sanitary pads (OB pads)	2 women/wk; 10pads/day	20 pads/wk	12 pads/box	2 boxes
Sharps disposal containers - 2 gallon	2-4 /wk/sub-unit	2-4/wk	20/case	0.25 cases
Sheets, disposable, paper, for stretchers & cots	100/day	700/wk		
Syringes, 10cc, luer lock	4 boxes/wk (100 ct box)	400/wk	100/box	4 boxes
Syringes, 3cc, luer lock, w/ 21g 1.5" needle	200/day	1400/wk	100/box	14 boxes
Syringes, catheter tip 60cc		25/wk	50/box	0.5 boxes
Syringes, Insulin	4/day	28/wk	100/box	0.25 boxes
Syringes, TB	2/day	14/day	100/box	0.4 boxes
Tape, silk - 1 inch	12/day	96/wk	12rolls/box	8 boxes
Tape, silk - 2 inch	6/day	42/wk	12rolls/box	3.5 boxes
Toilet tissue	25 rolls/day	175 rolls/wk		175 rolls
Tongue depressor		2 boxes/wk	500/box	2 boxes
Tubex [TM] pre-filled syringe holders	1 per staff member plus extras	12/sub-unit	50/case	.25 cases
Urinals		50/wk	50/case	1 case
Washcloths, disposable	10/pt/day	3500/wk		3500
Water, bottled 1 liter (for mixing ORT)	1/patient	200/wk		
Water container, 1 gallon potable		125/wk		125
Diagnostic Supplies				
Glucometer		1 per sub-unit	Ea	
Glucometer test strips		2 bottles/wk	50 strips/vial	2 vials
Probe covers for thermometers	4 boxes/day	28 boxes/wk	20/box	28 boxes
Protocol unit (or other brand), O2 sat monitor, thermometer, BP, HR		4 per sub-unit	Ea	
Protocol unit, disposable plastic BP covers	200/day	1400/wk		
Single Use Shielded Lancets	25/day	175/wk	200/box	1 box
Stethoscopes		12/sub-unit	Ea	12
Housekeeping and Misc. Supplies				
Backboard, plastic		1	Ea	1
Bleach	1 gal/day	7 gal/wk		7gallons
Microwave oven		1 per sub-unit		1
Refrigerator		3 per sub-unit		3
Stretcher, EMS (rolling)		2/sub-unit	Ea	2
Towels, paper	25 rolls/day	175 rolls/wk		175 rolls
Trash cans with pop lids (biologic), large		6 per sub-unit	Ea	6
Trash liners, red plastic (large)	6 changes/day x 6 trash cans	252/wk	100/roll	2.5 rolls
Wheelchair		10/sub-unit min	Ea	10

In addition to the items listed above, which only address medical supplies for one 50-bed nursing subunit, planners should also provide supplies and equipment for the other sections of the ACC. Those requirements are found in the description of each section (see Appendix B). General supplies common to all sections are not included in the lists but must be considered. Some of these common items include but are not limited to:

- Personal Protective Equipment (PPE) – The exact PPE requirements will be dependant upon the disease. Likely PPE will include:
 - Gloves
 - Surgical Masks
 - N95 Masks
 - Gowns
- Paper
- Pens/Pencils

APPENDIX F
Pharmaceutical Supplies

APPENDIX F: Pharmaceutical Supplies

1. Selected Pharmaceuticals. The list of stock medications that should be available in the ACC was determined by identifying the most likely symptoms the majority of patients would present with, regardless of the agent, as well as each drug's flexibility in action, treatment applications, and use across all age populations. An estimate was made regarding the percentage of patients on a 50-bed unit who might require that medication. Under most circumstances, the total quantity of medication required was based on the maximum allowable daily adult dosage. Pediatric dosing is provided where appropriate. All dosing is on an as-needed basis (PRN) except for antibiotics.

The chart below is calculated for one 50-bed subunit with 80 percent adults and 20 percent pediatrics at full capacity for one day and for one month.

(Note: A legend of all abbreviations used in the following table is included at the end of this document.)

Drugs	% of pts requiring drug	1 day	1 week
Antibiotic CDC push pack	100%	50 daily doses medication for all 50 patients	350 daily doses
Promethazine (Phenergan) Dosing: 12.5–25 mg q4–6hr (IV/IM/PR) Maximum dose: 200 mg/day Pediatrics: 0.25–0.5 mg/kg/dose q6h 25 mg/vial; 50 mg/suppository	100% 60%	320 vials (8 vials/pt/day x 40 pts) 40 suppositories (4 suppositories/day x 10 pts)	2,240 vials 210 suppositories
Digoxin (Lanoxin) Maintenance dose: 0.25 mg/day Loading dose: 1 mg/day divided QID (assume 1 pt requires loading dose & 4 pts require maintenance dose per day) 0.25 mg/tablet	10%	8 tablets (1 loading dose of 4 tablets + 4 maintenance doses)	56 tablets
Furosemide (Lasix) (Assume 4 pts/day require maintenance dose of 40 mg PO BID & 1 pt/day requires acute therapy of 100 mg IV BID) 40 mg tablets 100 mg/vial	20%	8 tablets 2 vials	56 tablets 14 vials
Diphenhydramine (Benadryl) Dosing: 25–50 mg IV/IM/PO q6h Pediatrics: 1 mg/kg IV/IM/PO q6h 50 mg/vial 12.5 mg/5 cc	75%	80 vials (4 vials/pt/day x 20 pts) 400 cc or 14 fluid ounces (80 cc/pt/day x 5 pts)	560 vials 100 fluid ounces

Drugs	% of pts requiring drug	1 day	1 week
Lorazepam (Ativan) Dosing: 2 mg IV/IM q6hr Pediatrics: 0.05 mg/kg/dose q6h 2 mg/vial	70% 75% for all	48 vials (4 vials/pt/day x 12 pts)	336 vials
Nitroglycerin SL 0.4 mg Dosing: 1 tab SL q5 min	10%	1 bottle	1 bottle
Insulin NPH & Reg Dosing: individualized (Assume 30 units/pt/day of NPH, 70/30 & Regular) 10 cc vials (100 units/cc)	6%	1 vial of NPH & Regular	1 vial of NPH & Regular
Albuterol MDI Dosing: 6 puffs QID with spacer Nebulizer: 1 u dose QID Multidose dispenser Unit dose for nebulizer	40%	12 MDI	12 MDI
Aspirin 325 mg Dosing: 325 mg/day for platelet inhibition (cardiac & TIA)	10%	1 bottle	1 bottle
Naloxone (Narcan) Dosing: 0.4 mg–2 mg IV/IM/SC q 3 min, PRN 1.0 mg/ml prefilled syringe (box of 10)	1%	1 box	1 box
Morphine Sulfate Dosing (titrate to effect): 5 mg IV/IM/SC q4h (0.1 mg/kg in 2-4 mg increments) Pediatrics: 0.1 mg/kg/dose 10 mg/vial	50%	100 vials (4 mg or 10 mg) (4 vials/pt/day x 25 pts)	700 vials
IV Fluids Dosing: 4 liters/pt/day Normal saline or D ₅ W .45% NS 1 liter bags Dump out half the IV bag for peds or use volutrols	50% (assumes the other 50% would use oral rehydration therapy)	100 liter bags 60 liters of NS 40 liters of D₅W.45%	700 liter bags (Assume 60% of pts are given NS and 40% of pts are given D₅W .45% NS; therefore, need 420 bags NS and 280 bags D₅W .45% NS)
Acetaminophen Dosing: 1 g q4h Pediatric: 15 mg/kg q4h (elixir volume based on a 32 kg child) 500 mg/tablet 160 mg/5 cc	100%	480 tablets (12 tablets/pt/day x 40 pts) 60 ounces of elixir (3 oz/day x 20 pts)	3,360 tablets 420 ounces of elixir
Spacers for Albuterol MDI 1 per pt	40%	12 spacers	84 spacers
Oral rehydration packets Oral rehydration therapy (ORT) is a primary mode of treatment for dehydration in mass casualty situations. One packet makes 1 liter	50%	100 packets (4 liters/pt/day x 25 pts)	700 packets

Legend

BID	twice-a-day dosing
cc	cubic centimeters
d	day(s)
D ₅ W	5% dextrose and water
h	hour(s)
IM	intramuscular
IV	intravenous
g	gram(s)
kg	kilograms
mg	milligrams
mL	milliliters
MDI	metered dose inhaler
min	minute
NPH	isophane insulin
NS	normal saline
ORT	oral rehydration therapy
oz	ounce(s)
PCN	Penicillin
PO	per os (orally)
PR	per rectum
PRN	as necessary
pt (pts)	patient (patients)
q	every (e.g., q6h = every 6 hours)
QID	four times daily
Rx	treatment or prescription
SC	subcutaneous
SL	sublingual
TIA	transient ischemic attack
u	unit(s)

2. Rationale for Selected Drugs:

- a. Promethazine (Phenergan): This drug is safe for both adults and pediatrics and has multiple uses in the clinical setting. It may be used as an anti-emetic, as an adjunct to narcotics to potentiate their effect and thus decrease the amount of narcotic used, and as a sedative to promote rest and calm agitated patients.
- b. Digoxin (Lanoxin): Given the expected mass casualty situation, it is likely that many patients would present with comorbidities including cardiovascular disease. Digoxin is versatile enough to treat arrhythmias as well as heart failure.
- c. Furosemide (Lasix): Most patients requiring diuresis respond to this diuretic or are on it for maintenance. It is stable, readily available, and inexpensive.

- d. Diphenhydramine (Benadryl): A very versatile drug to have on hand to treat allergic (drug) reactions, nausea, and insomnia.
- e. Lorazepam (Ativan): This drug provides effective treatment for both anxiety and insomnia. It is relatively safe with few side effects or contraindications and may be given IV or IM. Its rapid onset and short half-life make it a useful addition to the basic drug inventory.
- f. Nitroglycerin Sublingual: Provides a safe and effective treatment for congestive heart failure (CHF) and anginal pain. Use of this drug combined with aspirin may stabilize a patient long enough for transfer to a hospital if bed space is available. This combination may also be used for advanced cardiac care, or it may prevent the patient from further suffering.
- g. Insulin (Regular and NPH): Insulin was included in the basic drug inventory because approximately 6 percent of the general population are diabetic. In persons 65 years and older, the prevalence increases to more than 18 percent. Because the elderly are more susceptible to illness in general, it can be surmised that at any given time, the census of the ACC will lean towards more elderly than middle-aged patients and therefore a higher percentage of diabetics. Although regular insulin will be used more than NPH, some portion of the diabetic population will require both.
- h. Albuterol Meter Dose Inhaler (MDI): Albuterol is the bronchodilator of choice, when combined with a spacer, because of its ease of administration and rapid onset of action. It is assumed that the need for bronchodilators will be widespread since the respiratory tract will be the primary site of infection.
- i. Aspirin: This antiplatelet drug was included in the formulary to help treat cardiac or stroke (including transient ischemic attacks) comorbidity that may present to the ACC.
- j. Naloxone (Narcan): This drug prevents or reverses the adverse effects of narcotics, including respiratory depression, hypotension, and sedation. Because many patients will presumably receive morphine for pain and respiratory distress, it is imperative to have Narcan to reverse accidental overdoses.
- k. Morphine: Morphine is the preferred pain medicine because of its use in easing respiratory distress and decreasing cardiac oxygen consumption.
- l. Oral Rehydration Therapy (ORT): Many patients suffering from the effects of bioterrorist agents will present with dehydration from fever, emesis, or diarrhea. Rehydration may be accomplished by either ORT or intravenous routes. ORT may be used safely for patients with altered mental status (especially pediatric) and may be administered by family members with minimal instruction. It is the mainstay of disaster/epidemic relief worldwide.

Biological Pharmaceutical Inventory Questionnaire

Please complete the following questionnaire to the best of your ability, given an average day's inventory in your pharmacy and on your floors. The results of this survey will help determine our community's readiness for a bioterrorist attack and point out any potential deficiencies that need to be addressed by the community.

Name of Hospital: _____

Pharmacy Manager/Director: _____

Phone (Business Hours): _____

Phone (Off-hours or 24x7): _____

Antidote Name	Pharmacy Stock	ER Stock	Floor Stock	Total Stock
Ciprofloxacin 1200 mg "bulk vial"				
Ciprofloxacin 500 mg tablets				
Doxycycline 200 mg vials				
Doxycycline 100 mg capsules				
Tetracycline 500 mg capsules				
Streptomycin 1 gram vials				

How long would it take for your pharmaceutical companies to deliver the items listed above on an immediate (STAT) basis (on average)?

Antibiotics _____

In the event of biological incident elsewhere, approximately what percentage of your inventories would you be willing to release to that community for treatment of victims of that event (if needed for patients elsewhere)? _____

Would you be interested in participating in a "central store" of these agents by the community if it is found that inadequate inventories are currently present in the community? _____

APPENDIX G
BW Agents—Vaccine, Therapeutics, and Prophylaxis

Biological Warfare (BW) Agents—Vaccine, Therapeutics, and Prophylaxis

AGENT	CHEMOTHERAPY (Rx)	CHEMOPROPHYLAXIS (Px)	COMMENTS
Anthrax	Ciprofloxacin 400 mg IV q 8–12 h	Ciprofloxacin 500 mg PO bid x 4 wk If unvaccinated, begin initial doses of vaccine (0, 2 wk, 4 wk)	Potential alternates for Rx: gentamicin, erythromycin, and chloramphenicol
	Doxycycline 200 mg IV, then 100 mg IV q 8–12 h	Doxycycline 100 mg PO bid x 4 wk plus vaccination (0, 2 wk, 4 wk)	
	Penicillin 2 million units IV q 2 h		PCN for sensitive organisms only
Tularemia	Streptomycin 30 mg/kg IM divided BID x 10–14 d	Doxycycline 100 mg PO bid x 14d	
	Gentamicin 3–5 mg/kg/d IV x 10–14 d	Tetracycline 500 mg PO QID x 14 d	
Venezuelan Equine Encephalitis	Supportive therapy: analgesics and anticonvulsants prn		
Botulinum Toxin	DoD heptavalent equine despeciated antitoxin for serotypes A–G (IND): 1 vial (10 mL) IV		Skin test for hypersensitivity before equine antitoxin administration
	CDC trivalent equine antitoxin for serotypes A, B, E (licensed)		
Staphylococcus Enterotoxin B	Ventilatory support for inhalation Exposure		

Biological Warfare (BW) Agents Characteristics

AGENT	INCUBATION PERIOD	DURATION OF ILLNESS	LETHALITY
Anthrax (inhalational)	1–6 d	3–5 d (usually fatal if untreated)	High
Tularemia	2–10 d (average 3–5)	> 2 wk	Moderate if untreated
Venezuelan Equine Encephalitis	2–6 d	Days to weeks	Low
Botulinum Toxin	1–5 d	Death in 24–72 hours; lasts months if not lethal	High without respiratory support
Staphylococcus Enterotoxin B	18–24 h	Days—death within 10–12 d for ingestion	High (depending on route and amount of exposure) Low, depending on route and amount of exposure (incapacitating illness)

Source: U.S. Army Medical Research Institute of Infectious Diseases, Medical Management of Biological Casualties Handbook, 3rd ed., Fort Detrick, Frederick, MD, July 1998.