Hospital Preparedness for Mass Casualties

Final Report
August 2000

Summary of an Invitational Forum

Convened on
March 8-9,2000

by the American Hospital Association
with the support of the
Office of Emergency Preparedness,
U.S. Department of Health and Human Services

Contents

Appendices

A. List of attendees
B. Forum agenda
C. Resources/references
D. Emergency preparedness management plan (Standard EC.1.6)
E. Security management plan (Standard EC.1.4)
F. Hazardous materials & waste management plan (Standard EC.1.5)
G. Emergency preparedness drills (Standard EC.2.9)
H. List of suggested preparedness issues

Section I
Executive Summary

Disasters and incidents with hundreds, thousands, or tens of thousands of casualties are not generally addressed in hospital disaster plans. Nevertheless, they may occur, and recent terrorist actions around the globe suggest that it would be prudent for hospitals to improve their preparedness for a mass casualty incident. For that reason, and with the financial support of the Office of Emergency Preparedness of the U.S. Department of Health and Human Services (HHS), the American Hospital Association convened an "Invitational Forum on Hospital Preparedness for Mass Casualties" on March 8-9, 2000 in Chicago, Illinois.

The Invitational Forum brought together a diverse group of hospital and governmental personnel to develop recommendations and strategies for hospitals, hospital associations, and the HHS Office of Emergency Preparedness.

The attendees participated as individuals, not as representatives of their organizations. Attendees were asked to participate together in a conversation about the topic. All attendees accepted the opportunity to participate openly and candidly because everyone shared the desire to serve the health of their communities by helping hospitals prepare to serve effectively if a mass casualty incident arose in any community.

During 1999, hospitals across the nation engaged in a major preparedness effort: Y2K readiness. Y2K was easier to address than mass casualty preparedness. Y2K had a known time and place. It would occur on a defined date in every hospital.

Mass casualty preparedness is very different from Y2K because of its uncertainty. No one knows when an incident will occur, where it will occur, or what will be its cause. Of course, most hospital leaders hope their communities never experience a mass casualty incident. It must also be remembered that resources for mass casualty preparedness have to compete with other initiatives hospitals are being encouraged, or required, to adopt at the present time.

Attendees discussed a large number of issues and preparedness needs grouped into four broad categories:

- community-wide preparedness,
- staffing,
- communications, and
- public policy.

Selecting from the many individual observations and recommendations on preparedness, the primary conclusions are:

Community-Wide Preparedness

- By definition, mass casualty incidents overwhelm the resources of individual hospitals. Equally important, a mass casualty incident is likely to impose a sustained demand for health services rather than the short, intense peak customary with many smaller scale disasters. This adds a new dimension and many new issues to preparedness planning for hospitals.

- Hospitals, because of their emergency services and 24 hour a day operation, will be seen by the public as a vital resource for diagnosis, treatment, and followup for both physical and psychological care.

- Hospital preparedness for disasters has focused historically on a narrow range of potential incidents. To increase their preparedness for mass casualties, hospitals have to expand their focus to include both internal and community-level planning.

- Traditional planning has not included the scenario in which the hospital is the victim of a disaster and may not be able to continue to provide care. Hospital planners should consider the possibility that a hospital might need to evacuate, quarantine, or divert incoming patients.

- There are limited data on hospital emergency capabilities. In multi-hospital communities and regions there is a need to develop a real – time database, including an unduplicated count of potential staff.

Staffing

- Preparedness would benefit from development of a community-wide concept of “reserve staff” identifying physicians, nurses and hospital workers who are (1) retired, (2) have changed careers to work outside of healthcare services, or (3) now work in areas other than direct patient care (e.g., risk management, utilization review). While developing the list of candidates for a community-wide “reserve staff” will require limited resources, the reserve staff concept will only be viable if adequate funds are available to regularly train and update the reserves so that they can immediately step into roles in the hospital which allow regular hospital staff to focus on incident casualties.

- Hospital preparedness can be increased if state licensure bodies, working through the Federation of State Medical Boards, develop procedures allowing physicians licensed in one jurisdiction to practice

in another under defined emergency conditions. Nursing licensure bodies could increase preparedness by adopting similar procedures or by adopting the "Nursing Compact" presently being implemented by several states.

- Hospital preparedness can be increased if medical staff Credentials Committees develop a policy on the recognition of temporary privileges in emergency or disaster situations and if hospitals in a community regularly share lists of the medical staffs and their privileges.

Communications

- Everyday communications systems used in the community are likely to be overwhelmed in a mass casualty incident. Backup and redundant systems need to be developed, tested and drilled.

- A single community spokesperson for the mass casualty incident needs to be identified in advance, press and media briefings need to be regularly scheduled away from the hospital(s) but with supporting medical expertise.

- Community-wide systems for locating patients need to be planned with a single point of contact.

Public Policy

- In the present financial environment, where each payer wishes to pay only for the immediate costs of its patients, there is a need for a means to pay for the planning, education, standby supplies, and training costs of preparedness.

- The Emergency Medical Treatment and Labor Act needs to be refined to establish "safe harbor" provisions so that a hospital assigned a role of caring for unexposed patients does not have to violate either its status as a "clean" facility or its EMTALA obligation.

- The Stafford Act, which provides the authorization and framework for federal assistance by the Federal Emergency Management Agency, is more attuned to providing funds for property damage than for the added costs, or lost revenues, accompanying health services. A new federal approach is needed which expresses the Congressional commitment to assist hospitals in disaster recovery. The federal government needs to provide necessary catastrophic financial relief to assist hospitals in caring for disaster victims and in disaster recovery. This funding should recognize economic loss and establish the federal

government, perhaps with a cost sharing role with the states, as a last dollar payer.

Finally, hospital preparedness can be increased more rapidly if standardized but scalable national resources for staff training, building design, and facilities operations are developed and widely disseminated.

Implemented together, these recommendations would increase hospital preparedness for mass casualty incidents.

Section 2
Preface

Hospitals have multiple missions:

- patient care,
    - clinical education,
    - clinical research, and
    - community service.

Two of these missions come together when a community prepares for and faces an emergency or disaster: patient care and community service.

The hospital's patient care role begins with and follows the disaster. The hospital's community service role begins long before the disaster as the hospital develops, tests, and implements its disaster plan. The objective is to prepare the hospital through the development of emergency response systems, staff training, and purchase of equipment and materials so that it can continue caring for its present patients, protect its own staff, and respond to the needs presented by the disaster.

A hospital's disaster plan usually addresses both internal emergencies, such as loss of electric power or potable water, and external disasters. Some of the external disasters are the results of events in nature. For some natural disasters--hurricanes, floods, and volcanoes—hospitals are likely to receive advance warning and be able to activate their disaster plan before the event. For other natural disasters, such as earthquakes, there is no advance warning. Many man-made disasters, or emergencies, also provide no advance warning. These include chemical plant explosions, industrial accidents, building collapses, and major transportation accidents.

In the last few years, a new category of disasters has appeared: terrorist acts. In New York City and Oklahoma City, bombings resulted in deaths and a significant number of injuries. In Japan, a religious sect used toxic chemicals in a subway to create illness and injury. The potential for biological terrorism with the agents of anthrax, smallpox, Ebola, plague or other infections is also real.

The United States has been very fortunate. In recent years, most disasters have been characterized by heavy property damage and a modest number of deaths or injuries requiring attention. We may not always be as fortunate. Natural or man-made disasters could realistically result in hundreds or thousands of casualties. Some terrorists appear to desire a high casualty count to provoke public anxiety and undermine social order.

Incidents with hundreds, thousands, or tens of thousands of victims are not generally addressed in hospital disaster plans. For that reason, and with the financial support of the Office of Emergency Preparedness of the U.S.

Department of Health and Human Services (HHS), the American Hospital Association convened an "Invitational Forum on Hospital Preparedness for Mass Casualties" on March 8-9, 2000 in Chicago, Illinois.

The Invitational Forum brought together a diverse group of hospital and governmental personnel to develop recommendations and strategies about mass casualty preparedness for hospitals, the American Hospital Association, state and regional hospital associations, and the HHS Officer of Emergency Preparedness. Attendees are listed in Appendix A.

Because of past and present work and community experiences, attendees included individuals who had served in state and local government, as emergency medical technicians, as epidemiologists, as members of a community's HazMat team, as community planners and more. Individuals generously drew on their full and varied backgrounds as they developed and shared ideas.

The attendees participated as individuals. While each is listed with their position and organization, attendees were asked to participate as individuals informed by their career experience, not as representatives of their organization. This was done to obtain the broadest and most open conversation possible.

Attendees were asked to participate together in a conversation around the important topic of mass casualty preparedness. All attendees accepted the opportunity to participate openly and candidly because everyone shared the desire to serve the health of their communities by helping hospitals prepare to serve effectively if a mass casualty incident arose in any community.

Attendees are knowledgeable of hospital disaster plans. In some cases, the attendees' knowledge was limited to the plan of their own institution(s); in other cases, the individual had knowledge of and experience with multiple plans. The conversation at the Forum did not attempt to restate the common elements widely included in hospital disaster plans. Rather, the conversation focused on the augmentations that would be necessary for a mass casualty incident.

This report is a summary of the discussion and recommendation of the "Invitational Forum on Hospital Preparedness for Mass Casualties." The agenda used for the Forum is presented in Appendix B. It should be noted that the Forum did not spend much time addressing the nature, form or likelihood of mass casualty incidents. While attendees were provided with the background materials and references listed in Appendix C, the focus of the Forum was on the issues and strategies for preparedness and response, not the cause of the incident.

In general, the recommendations and strategies developed at the Forum are relevant to mass casualty incidents regardless of cause. Where

recommendations are specific to or heightened by a particular kind of mass casualty incident, the nature of the incident is identified.

Section 3
Background and Framework

Background

During 1999, hospitals across the nation engaged in a major preparedness effort: Y2K readiness. Y2K was easier to address than mass casualty preparedness. Y2K had a known time and place. It would occur on a defined date in every hospital.

Mass casualty preparedness is very different from Y2K because of its uncertainty. No one knows when an incident will occur, where it will occur, or what will be its cause. Of course, most hospital leaders hope their community never experiences a mass casualty incident. This makes it much more difficult for hospitals to allocate the staff time and financial resources necessary to establish a preparedness plan for a mass casualty event. Most hospitals would prefer to use their limited resources to address the needs of today's patients rather than the potential, hopefully unlikely, mass casualty preparedness needs.

Developing recommendations and strategies for mass casualty preparedness requires addressing a careful balance. In the ideal world, every hospital would be fully prepared to address every contingency. In the real world, however, resources committed to one purpose are often unavailable for another, although some contingencies can benefit from the planning for others.

Recommendations and strategies for mass casualty preparedness have to address a broad range of institutions. To appreciate the challenge of developing recommendations on preparedness, the Invitational Forum reviewed a number of background characteristics of the hospital field. Table 1 and 2 show that the nation's hospitals vary substantially by size and sponsorship. Initiatives to encourage mass casualty preparedness must accommodate this diversity.

Net revenues are one measure of hospital financial resources. Net revenues are determined as follows:

$$\frac{\text{Total Revenues minus Total Expenses}}{\text{Total Expenses}} \times 100$$

Table 3 shows that hospital financial status varies substantially by census region and bed size.

Many in the hospital field believe these average net revenues must be tempered by recognition of two factors. First, despite the positive average net revenues for the field as a whole, approximately 30% of hospitals are operating in the red. Second, under generally accepted accounting principles, hospital net revenues have to include unrealized appreciation on investments, such as stocks and

TABLE 1
Number of U.S. Hospitals by Bed Size, 1998.

Bed Size	Total Hospitals*	Community Hospitals**
6-24 beds	361	293
25-49 beds	1,039	900
50-99 beds	1,405	1,085
100-199 beds	1,523	1,304
200-299 beds	735	644
300-399 beds	411	352
400-499 beds	218	183
500 or more beds	329	254
TOTAL	6,021	5,015

*Includes Federal, long-term care, and hospitals for the mentally retarded.
**Limited to nonfederal, short-term general and other specialty hospitals (e.g., children's hospitals). Includes university medical centers.

Table 2
Number of Community Hospitals by Ownership, 1998

Type of ownership	Community Hospitals
Non-government, not-for-profit	3,026
Investor-owned	771
State and Local Government	1,218

Table 3.
Distribution of 1998 net revenues by census region and bed size, 1998

Census Region	Average Net Revenue
New England	4.15%
Mid Atlantic	1.01
South Atlantic	2.66
E North Central	2.50
E South Central	1.20
W North Central	2.09
W South Central	4.87
Mountain	5.86
Pacific	7.30
Bed Size	
6-24 beds	5.74%
25-29 beds	7.42
50-99 beds	1.46
100-199 beds	6.89
200-299 beds	(0.31)
300-399 beds	1.79
400-499 beds	3.15
500 or more	4.21

mutual fund holdings. Whether these unrealized gains will be realized or disappear in the stock and bond markets is unknown.

Finally, resources for mass casualty preparedness have to compete with other initiatives hospitals are being encouraged to adopt at the present time. These include, in no particular order:

- Billing system accuracy and compliance
- Safer needles and needleless systems
- Limitations on medical device reuse
- Medical error reduction
- Medication error reduction
- Privacy and security of personal medical information
- Filtering of blood products
- New requirements for restraint and seclusion
- Ergonomic standards for employees
- Reduce solid wastes, especially of heavy metals
- Heightened productivity to meet Balanced Budget Act payment targets
- Uniform billing procedures and processes for all payers

Each of these initiatives addresses a public need. Unfortunately, they compete with each other and with mass casualty preparedness for hospital attention, funds, and personnel.

Existing Preparedness Requirements

In developing disaster plans, hospitals must take into account the broad, national preparedness requirements imposed by the Health Care Financing Administration (HCFA) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

In December 1997, HCFA published revised requirements (i.e., Conditions of Participation) for hospital emergency preparedness. While the regulations have not been finalized, the proposed rules provide the most up-to-date statement of HCFA's expectations:

> (4) The hospital must have an emergency preparedness system for managing the consequences of power failures, natural disasters or other emergencies that disrupt the hospital's ability to provide care.

This emergency preparedness requirement is supplemented by HCFA requirements for emergency services. In the same December 1997 Notice of Proposed Rulemaking, HCFA proposed:

Sec. 482.50 Condition of participation: Emergency services.

The hospital provides, within its capabilities and its stated mission, services appropriate to the needs of persons seeking emergency care. If the hospital provides emergency services on a full-time or part-time basis, it meets the applicable standard in paragraph (a) or paragraph (b) of this section, respectively; if the hospital does not provide any emergency services, it meets the standard in paragraph (c) of this section.

(a) *Standard: Hospitals providing full-time emergency services*. If the hospital provides emergency services on a 24-hour-per-day, 7-day per week basis, the hospital meets the following requirements at all times:

(1) The hospital has sufficient numbers of personnel, including doctors of medicine or osteopathy, other practitioners and registered nurses, to meet patient needs for emergency care.
(2) The services are appropriate to patient needs.
(3) The emergency services provided are integrated with other departments of the hospital.

(b) *Standard: Hospitals providing part-time emergency services*. If the hospital provides emergency services, but not on a 24-hour per day, 7-day per week basis, the hospital meets the following requirements:

(1) The hospital has fewer than 100 beds and is located in a rural area as defined in Sec. 412.62(f)(1)(iii) of this chapter.
(2) The hospital establishes regular hours and days when the emergency services are available, and actually has services available at all of those times.
(3) The hospital notifies local emergency services personnel, law enforcement agencies, physician offices, and other health facilities of when it does and does not offer emergency services, and provides those it has notified with at least 5 calendar days' advance notice of any changes in its emergency services schedule.
(4) The hospital posts its days and hours of operation of emergency services in a conspicuous place where the public most commonly is informed of the hospital's location.
(5) The hospital complies with the requirements of paragraphs (a)(1) through (a)(3) of this section at all times when it does offer emergency services.
(6) The hospital complies with the requirements of paragraph (c) of this section at all times when it does not offer emergency services.

(c) *Standard: Hospitals not providing emergency services*. If the hospital does not provide emergency services, the hospital must provide for appraisal of emergencies, initial treatment, and referral when appropriate.

HCFA's Medicare Conditions of Participation for emergency preparedness and emergency services establish the minimum requirements for hospitals that participate in the Medicare and or Medicaid programs. They are broadly written in recognition of the diversity of hospitals by size, mission, and community.

The JCAHO requirements are also written to apply to the full range of hospitals from small rural facilities to academic medical centers in urban cities. The preparedness standards are focused in four areas:

- Emergency preparedness management plan (Standard EC.1.6),
- Security management plan (Standard EC.1.4),
- Hazardous materials and waste management plan (Standard EC.1.5), and
- Emergency preparedness drills (Standard EC.2.9).

The present JCAHO standards for these four areas are included with the permission of the JCAHO as Appendices D-G of this report.

JCAHO standards for the "Emergency Preparedness Management Plan" require hospitals to address the following:

- Specific procedures in response to a variety of disasters or emergencies
- Role in community-wide plan
- Role of external authorities
- Space, supplies, security
- Radioactive or chemical isolation & decontamination
- Notifying and assigning personnel
- Evacuation and alternative care site
- Managing patients
- Backup for utilities and communication
- Orientation and education
- Performance monitoring
- Annual evaluation

Separate from, but related to, the standards for Emergency Preparedness Management Plan are JCAHO standards addressing the hospital's Security Management Plan. In this component of its plan, hospitals must address:

- Access to/egress from sensitive areas
- Vehicular access to urgent care areas
- Security incident or failure
- Civil disturbance, media
- Control of human and vehicle traffic

While some incidents such as a power failure do not produce hazardous materials, incidents such as chemical accidents or industrial explosions may. JCAHO standards require hospital plans to address:

- Applicable law and regulation
  - OSHA
  - EPA
- Handling and disposing of wastes
- Space and equipment
- Emergency procedures for exposures
- Personal protective equipment

These requirements are likely to be highly relevant to any mass casualty incident, especially if it results from terrorism.

Finally, JCAHO standards require hospitals to conduct two emergency preparedness drills per year. These simulations are designed both to provide training exercises as well as to identify unanticipated shortcomings of the current plan so that revisions may eliminate weaknesses. The hospital is responsible for determining the particular disaster scenarios, but one drill must involve an influx of patients beyond those presently being treated by the hospital. The second drill may involve either an internal or an external disaster.

The JCAHO standards are regularly reviewed and updated. For 2001, the Invitational Forum understood that the JCAHO is considering several changes, including the following:

- Changing the title of standard EC.1.6 from “Emergency Preparedness” to “Emergency Management” to reflect the broader perspective that hospitals must both prepare for and effectively execute their plan,
- Revise the standards to focus attention on:
  - Clearly identifying who is in charge of what and when they are in charge
  - Establishing a command structure
  - Managing the logistics of critical supplies
- Assure that “Emergency Management” includes management of:
  - Patient scheduling, services, information, & transportation
  - Security
  - Consideration for staff family support
  - Interaction with family members
  - Interaction with news media
  - Critical processes when an alternative care site is necessary:
    - ✓ Patient packaging (medications, admissions, medical records) and tracking
    - ✓ Inter-facility communication
    - ✓ Transportation of patients, staff, & equipment

- ✓ Cross-privileging of medical staff
- Disaster recovery
- Availability of essential utilities (electricity, water, fire protection, fuel sources, medical gas, & vacuum)
- Back-up systems for internal and external communications.

After reviewing present JCAHO requirements, Forum attendees discussed mass casualty preparedness in light of the JCAHO standards. The question was raised of how meaningful the JCAHO standards are to hospitals. While no attendee could identify a hospital that had lost its accreditation solely because of an inadequate disaster plan, attendees from hospitals reported the JCAHO standards have a major impact on the priority given to disaster preparedness in hospitals. No hospital wishes to receive a Type 1 (i.e., most serious) recommendation for the inadequacy of its plan or its annual drills. Thus, despite the fact that the JCAHO generally visits a hospital only once every three years, the standards discussed above do give added priority to emergency preparedness, disaster planning, and preparedness drills.

At the same time, attendees expressed concern that both hospitals and the JCAHO have historically addressed relatively small-scale incidents. Disasters have been seen as something that overwhelms, at least temporarily, the capacity of a hospital. An industrial explosion or airplane crash may result in a patient load that does overwhelm a single hospital or even a small number of hospitals. Thus, drills based on these incidents are appropriate.

If the disaster is a mass casualty event, such as a major earthquake or biological terrorism, the patient load may overwhelm all of the hospitals, the offices of physicians, and the general resources of the community. A disaster plan limited to an individual facility is inadequate. A single facility's plan may address part of the spectrum of disasters appropriately, but its weakness is that it may ignore larger scale incidents. Therefore, hospital preparedness should expand from planning within the context of a single hospital organization to planning by the hospital to become part of a community-wide initiative to address mass casualties. This would necessitate participation in community-wide preparedness drills.

While the majority of hospitals are accredited by the JCAHO and work to comply with its standards, some hospitals are not JCAHO accredited. Many of the unaccredited hospitals are in small rural communities, which may not perceive themselves as likely to experience a mass casualty incident. Nevertheless, all hospitals should include responding to the basic elements of mass casualty incidents in their preparedness plan. When hospitals are not JCAHO accredited, it was suggested that the state licensing body or a similar entity have the responsibility for assuring that the hospital's disaster plan addresses both incidents of limited and mass casualties.

In a disaster, especially one for mass casualties, the hospital may receive more patients than it can handle. Or, if the incident results from chemical or biological exposure, the community may need to protect itself by designating some hospitals as open to victims and others as open only to patients who have not been exposed to the chemical or biological contaminants.

Federal legislation, known as EMTALA for the Emergency Medical Treatment and Labor Act, governs what a hospital must do when potential patients present themselves, even if the hospital has closed its emergency room because of an excess of patients or to protect the health of current patients.

The implementing regulations for the Emergency Medical Treatment and Labor Act (EMTALA) state:

> If any individual (whether or not eligible for Medicare benefits and regardless of ability to pay) comes by him or herself or with another person to the emergency department and a request is made on the individual's behalf for examination or treatment of a medical condition by qualified medical personnel (as determined by the hospital in its rules and regulations), the hospital must provide for an appropriate Medical Screening Examination within the capability of the hospital's emergency department, including ancillary services routinely available to the emergency department."

The EMTALA interpretive guidelines provided by HCFA state:

> A hospital may deny access to patients when it is in 'diversionary' status because it does not have the staff or facilities to accept any additional emergency patients at that time. However, if the ambulance disregards the hospital's instructions and brings the individual on to hospital grounds, the individual has come to the hospital and the hospital cannot deny the individual access to hospital services.
>
> Individuals coming to the emergency department must be provided a medical screening examination beyond initial triaging. Triage is not equivalent to a medical screening examination. Triage merely determines the 'order' in which patients will be seen, not the presence or absence of an emergency medical condition.
>
> A hospital, regardless of size or patient mix, must provide screening and stabilizing treatment within the scope of its abilities as needed, to the individuals with emergency medical conditions who come to the hospital for examination and treatment.

Thus, if mass casualty patients present themselves physically at the hospital or on hospital property, the hospital has a legal obligation to provide at least a

medical screening examination. Under present law, there is no provision to "waive" this requirement even if a failure to accept, screen, or treat a patient would benefit the community's health. The consequences of the present law will be addressed in the section on recommendations for public policy.

The Medicare Conditions of Participation of HCFA, the standards of the JCAHO, and the provisions of the EMTALA statute provide the broad national context for mass casualty preparedness. Hospitals also are subject to additional regulations of the Occupational Safety and Health Administration and of the Environmental Protection Agency. Finally, hospitals are subject to state and local government rules and regulations. Because the Invitational Forum drew its participants from throughout the nation, limited information on the requirements of individual states or local governments was discussed.

Framework for Forum Discussions

Before beginning to identify issues and develop recommendations and strategies, attendees discussed the role of the hospital in mass casualty incidents. The discussion was initiated to see if there were some clearly defined limits or boundaries to preparedness and, therefore, for the Forum itself. The discussion began with a grid of potential hospital involvement based on three dimensions: (1) cause of incident (e.g., explosion, chemical contamination, or biological exposure), (2) role in incident (e.g., prevention, agent identification, and treatment), and (3) type of involvement (i.e., clinical or administrative systems). Attendees found the mass casualty topic too broad and the initial grid too narrow to be helpful. After extensive discussion, attendees concluded it was not possible to prepare a simple grid showing the priorities for mass casualty roles a hospital must prepare for and those it can give a low priority. There are simply too many types of mass casualty incidents requiring too many different responses to develop a simple planning typology.

Attendees did agree, however, on a number of observations that provide a framework for mass casualty preparedness:

- Mass casualty incidents, by definition, overwhelm the resources of individual hospitals. They may overwhelm the resources of a community's entire health care system. Therefore, mass casualty incidents should be seen as community-wide concerns likely to require a broad array of community resources to supplement the health care system. Local government will assuredly be involved, including both the public health department and the public safety systems of police and fire departments. Other community resources are likely to also be called upon. This may include schools, churches, public transportation, news media, telephone and communication systems, voluntary organizations (e.g., Red Cross and Salvation Army), restaurants and food suppliers.

- Because of their emergency services and 24 hour a day operation, hospitals will be seen by the public as a vital resource for diagnosis, treatment, and followup for both physical and psychological care.

- While some mass casualty incidents may follow the pattern of an intense, short-time peak of activity, others (e.g., bioterrorism incidents) will present the community and health system with rapidly increasing demands that plateau and have to be addressed for days or weeks.

- The local community is the primary resource for initially responding to the incident and providing subsequent clinical care. To assemble and transport resources to the site of the incident, state and federal governments will need time. They may supplement local resources across time, but no community should plan on its state government or the federal government as either the initial or primary clinical resource in a mass casualty incident.

- Mass casualty incidents that result from infectious causes are different from all other types of incidents for many reasons, including:
    (1) the onset of the incident may remain unknown for several days before symptoms appear,
    (2) even when symptoms appear, they may be distributed throughout the community's health system and not be recognized immediately by any one provider or practitioner,
    (3) once identified, the initial symptoms are likely to mirror those of the flu or the common cold so that the health system will have to care for both those infected and the "worried well,"
    (4) having gone undetected for several days or a week, some infectious agents may already be in their "second wave" before the first wave of casualties is identified,
    (5) public confidence in government officials and health care authorities may be undermined by the initial uncertainty about the cause of and treatment for the outbreak,
    (6) health care authorities and hospitals may want to restrict those infected to a limited number of hospitals but the public may seek care from a wide range of practitioners and institutions, and
    (7) health care workers may be reluctant to place themselves or family members at increased risk by reporting to work.

- Hospitals lack a "toolkit" of best practices in facility design, engineering operations, and facilities management systems which they can use to identify best practices for planning and implementation. While no single set of "tools" will be appropriate for all hospitals because of their variation in size, clinical programs, and patient community, a "toolbox" of scalable options with their estimated costs could facilitate more rapid development of hospital preparedness. Federal support for

development and dissemination of the “toolkit” would be valuable because it would minimize duplication and provide most consistency across the nation.

- There is a need to develop a widely understood and widely used classification system for mass casualty incidents so that communities can communicate their needs internally and with outside resources.

In light of this broad discussion and set of observations, the Forum then followed a three-step process. First, attendees were asked to identify the key issues they saw for hospitals mass casualty preparedness. All of the issues suggested in the initial brainstorming are shown in Appendix H. Second, using the issues identified, attendees were asked to identify the “show stoppers.” These are the issues that will bring everything to a halt if not adequately addressed. Four broad categories of “show stoppers” were identified:

- community-wide preparedness,
- communications,
- staff readiness, and
- public policy.
-

Finally, attendees were asked to develop recommendations and strategies for addressing each of the four sets of “show stoppers.”

Section 4
Recommendations on Community-Wide Preparedness

Disasters in communities come in all shapes and sizes. Some impact a small number of people, place intense demands on the health system for a short period, and conclude. Others may involve large number of casualties but reach a plateau only after a latent period, placing heavy continuing demands on the health system. Bioterrorism incidents, by their very definition, are much closer to the second.

Attendees at the Forum believe hospitals have a long history of preparing for and responding to short, intense disasters. Numerous examples of one of more hospitals responding to a plane crash, a train wreck, a flood, or an earthquake provide evidence that hospitals had appropriate plans in place, staff understood how to implement the plan, and the plan was sufficiently flexible to respond to the specifics of the incident.

Attendees are less comfortable that large numbers of hospitals are prepared for mass casualty incidents. Mass casualty incidents will overwhelm any single organization. Mass casualty incidents require the hospital to operate on three planes simultaneously: it must respond as:

- an organization in its own right,
- a part of the community's health care system, and
- as one component in a community-wide effort that extends far beyond the health system.

Attendees recommend that hospitals adopt a community-wide perspective and leadership role in planning and preparing for a mass casualty incident. This leadership role does not mean that the hospital needs to necessarily take primary responsibility for the community planning, just that hospitals work with other community leaders to effect an integrated community-wide plan. This broad perspective needs to begin with trustee development and education. Hospital trustees need to understand that their role involves both fiduciary responsibility for the institution and establishing linkages with the broader community. Both trustees "hats" are necessary for effective mass casualty preparedness.

Within the hospitals, attendees recommended that hospitals broaden the scale and scope of their disaster plans to link with and involve the community. Suggested linkages include:

- Communities need to develop horizontal and vertical relationships between the organizations, governmental and private, that will be called upon to work together in a mass casualty incident. Hospital participation in these functions is essential. While each community leader is primarily responsible for his or her own organization, it is

essential that senior representatives from each organization know each other personally, have developed working relationship with each other, and understand the roles that are planned for each organization. In the midst of responding to a mass casualty incident, there is no time to develop the infrastructure or trust and awareness necessary for the community to respond as a whole.

- Establish an open and ongoing relationship with the local health department and its leadership. While some mass casualty incidents may be easily identified and defined, biological incidents in particular require a community-wide surveillance and control effort to assemble apparently isolated incidents into a recognizable pattern that identifies the gravity of the challenge and institutes appropriate public health interventions, e.g. immunizations and prophylactic antibiotics.

- Develop periodic meetings with police and fire officials whose staff will be "first responders" to some mass casualty incidents and may be required by the hospital to enforce crowd control as the number of casualties increases. These meetings should be used to create a shared understanding of the different cultures between health care, public safety, and law enforcement organizations. They also should provide the opportunity to build the personal trust necessary for mutual action in the developing and potentially chaotic stages of a mass casualty incident.

- Develop and test daily a community-wide communications network. Recent disasters have demonstrated that different organizations may use different media and/or different frequencies in their communications. Unable to communicate with one another, precious time can be lost at the start of a mass casualty incident.

- Because of the broad scope of the incident, communications overload throughout the community is possible. Backup and redundant systems should be identified in advance to help assure communications. This should include an agreed-upon and tested courier service in case voice communications fail or are overloaded.

- Within the health care community, hospitals have an opportunity to use their existing emergency medical system (EMS), trauma coordination, and neonatal care relationships as a framework on which to build expanded relationships for mass casualty preparedness. The existing programs provide a framework for communications linkages, joint and complementary funding, and data collection and sharing.

- Communities and regions need to create and/or link existing data reporting systems to provide a community-wide assessment of health

needs and resources. Mass casualty incidents will increase demands simultaneously on all of the community's health resources. There will not be adequate time or unused personnel to survey hospitals, community health centers, multi-specialty clinics, nursing homes, and public facilities to inventory capabilities after the incident starts. Data systems which have a common architecture to integrate "streaming" data from institutional operations will provide the best means of matching community needs to available resources.

- Community-wide mass casualty drills should supplement the individual hospital and small casualty community drills generally in use today.

At the state and national levels, steps can be undertaken to facilitate the community and regional preparedness essential for mass casualty incidents.

- Biological incidents will be the most difficult for the community to understand and effectively coordinate its response. Valuable time is lost if public health officials are unable to rapidly identify and communicate the threat represented by what appears to be a series of unrelated illnesses. The federal government should continue to provide support for epidemiological programs which allow hospitals to submit rapidly information on atypical patients so that community-wide patterns can be identified as soon as possible.

- The traditional separation between the medical care community (e.g., hospitals, physicians, and nursing homes) and the public health community needs to be bridged in preparation for mass casualty incidents. Mass casualties will provide more work than any organization itself can address. Coordination is key, and the historic separation is a genuine disadvantage.

- Special funding for the development and testing of mass casualty preparedness plans and drills are essential. To obtain the greatest benefit for the community, the funds should be provided to a community-wide organization which is required to involve the community's political leadership, public safety services, public health services, hospitals, and community health centers.

- Hospital associations, alliances, and systems can facilitate mass casualty preparedness of their members by establishing linkages with the public health community, identifying and communicating "best practices," identifying and sharing "lessons learned" from disasters and emergencies of all sizes, and facilitating more uniform data definitions and reporting systems for institutional capacity.

Section 5
Recommendation on Staffing

As previously stated, mass casualty incidents are likely to overwhelm the capacity of individual hospitals and, perhaps, all of the hospitals in the community. Traditionally, hospital capacity has been described in terms of the availability of beds. Having unoccupied beds to use for casualties remains important; however, it is the judgment of the Forum attendees that the availability of adequate numbers of trained staff is a better indicator of the capacity of the health system to respond to mass casualty incidents. This section addresses Forum recommendations in three sections: numbers of staff, training for staff, and staff support.

Numbers of staff

In hospital disaster plans, staff augmentation is regularly addressed in a variety of ways, including extending hours of present staff and calling in supplemental staff. If all of the disaster plans in a community are collected, they appear to provide for a substantial augmentation of staff. This includes medical staff, nursing staff, technicians and technologists, and support services staff. However, it is common for each hospital's disaster plan to be prepared individually. Thus, there is a real potential for double counting of potential staff. That is, two (or more) hospitals may envision using the same resources for staff augmentation. In a mass casualty incident where the full human resources of the community are stressed, attendees recommend that hospitals improve their preparedness by working together to develop an unduplicated estimate of the number and sources of additional staff.

A number of very basic steps can expand hospital staffing for mass casualty incidents:

- Development of a community-wide concept of "reserve staff" identifying physicians, nurses and hospital workers who are (1) retired, (2) have changed careers to work outside of healthcare services, or (3) now work in areas other than direct patient care (e.g., risk management, utilization review). While developing the list of candidates for a community-wide "reserve staff" will require limited resources, the reserve staff concept will only be viable if adequate funds are available (1) to regularly train and update the reserves so that they can immediately step into roles in the hospital which allow regular hospital staff to focus on incident casualties and (2) develop protocols for where and how to use such staff efficiently and safely.

- It may be possible to expand the "reserve staff" concept to include medical, nursing, and allied health students training in programs affiliated with the hospital(s). Attendees recognize that this potential is

untested and may not be feasible if the students actually reduce available staff time because of their needs for supervision.

- Licensure of health professionals is generally conducted on a state-by-state basis. Licensure practices limit the flexibility and availability of potential staff. Hospital preparedness can be increased if state licensure bodies, working through the Federation of State Medical Boards, develop procedures allowing physicians licensed in one jurisdiction to practice in another under defined emergency conditions. Nursing licensure bodies could increase preparedness by adopting similar procedures or by adopting the "Nursing Compact" presently being implemented by several states.

- Medical staff privileges are generally granted on a hospital-by-hospital basis. In a mass casualty incident, physicians may be unable to reach the hospital where they usually admit patients. Hospital preparedness can be increased if medical staff Credentials Committees develop a policy on the recognition of temporary privileges in emergency or disaster situations and if hospitals in a community regularly share lists of the medical staffs and their privileges.

- In the initial hours of a mass casualty incident, "first responders" (i.e., EMS, police, and fire personnel) may be fully occupied in the on-scene care and potential de-contamination of casualties. However, as the duration of the incident progresses, first responders may be potential sources to help augment hospital staff. Attendees were unaware of communities which have developed and tested this concept. There needs to be an effort to identify communities who have tested, by design or default, this approach. If actual experience can not be identified, funding to explore the concept in communities of various sizes is needed.

- In many disaster drills, the incident places a short-term but intense demand upon the hospital. As a result, the clinical personnel experience a substantial increase in demands, but the support staff (e.g., food service workers, housekeepers) may have only a limited change in demands. In a mass casualty incident, the demand for both care and support services may be more sustained. Hospital preparedness will be facilitated by providing for augmentation of both clinical and non-clinical, support staff.

- Forum attendees believe some biological incidents are different because of their risk of infecting hospital staff. Biological terrorism will pose additional challenges of both uncertainty and fear. Reactions to unknown infectious agents can perhaps best be gauged by the reaction of health workers to AIDS/HIV in the early 80's, when some

workers were reluctant to care for infected patients. Attendees recognize that staff concerns can be reduced through appropriate education and the use of universal precautions until the nature of the disease agent is understood. However, hospital preparedness plans need to include contingency plans in case medical professionals, and or volunteers, do not show up.

- Communities have a long history of helping hospitals in times of crisis. A frequent demonstration of this community support is the willingness of individuals with four-wheel drive vehicles in Northern states to provide transportation assistance to hospital patients and staff during snowstorms. Attendees believe the potential for untrained volunteers to assist with a mass casualty incidents is very limited. Hospital staff will be under enormous demands and stress. There will be only limited time to identify, train on site, and supervise volunteers. In some cases, volunteers may add to the problems of staff identification and crowd control.

Staff training

In mass casualty incidents, there is unlikely to be time to conduct intensive staff training between identification of the incident and its onset. Weather related natural disasters—floods and hurricanes—may provide a little lead time for training, but most of the available time will be consumed by implementing the disaster plan and by staff needs to arrange care for members of their families and for pets.

- Mass casualty incidents require a prompt response and implementation of both the institutional and community-wide disaster plans. A more prompt response will be forthcoming from the full range of staff if education on potential incidents and their expected risks and consequences are taught to all hospital staff prior to the onset of any incident.

- While many hospitals rely on information resources originally developed by the military services for addressing chemical and biological exposure, some of the information and supplies assumed in a combat situation are not representative of civilian hospital environments. Attendees believe standardized materials oriented to training hospital personnel need to be developed and made widely available. Such materials would facilitate training, allow for a more standardized body of information across the hospital field, reduce the loss of expertise that accompanies employee turnover, and be cost efficient. Federal grants are seen as the only realistic source for developing the necessary training resources. Upon development, federal agencies should work with medical, nursing, and hospital

associations to make the availability of the materials widely known through newsletters, member advisories, and association web pages.

Hospital preparedness for mass casualty incidents will be increased if hospitals engage in regular, ongoing "in service" training programs and in readiness drills. But, the resources required for this training are expensive: training materials must be developed, trainers must be trained, staff must be released from other obligations, and supplies must be consumed. No payer for hospital services includes in their payments funds for the staff education necessary for hospital preparedness. The costs of hospital preparedness can be reduced in a number of ways:

- The American College of Emergency Physicians is presently completing the first phase and launching the second phase of developing a standardized curriculum and set of training materials for mass casualty preparedness. Access to these materials and subsidies for their purchase should be made available to all hospitals. The subsidies may result from federal or state grants, from grants from national or community foundations, or from local charities, such as the United Way.

- Historically, training has relied upon printed materials and training films. While both remain relevant, training materials using videotapes, CDs, and web-based technologies should be explored to provide more cost-effective and readily revised resources.

Staff support

Faced with the demands of a mass casualty incident, physicians and hospital staff will be called upon to provide extraordinary service to their communities. Pressure and stress will be high. Casualties will be numerous and may include friends and neighbors. To allow staff to function at their highest potential, attendees offer the following recommendations:

- Facing long hours and the likelihood of limited communications, hospital staff do not need the distraction of worrying and arranging for the needs of family members. In some communities, the network of an extended family or established group of friends may provide "coverage" during the incident. In many communities, however, population mobility, nuclear family structures, and single parent families may mean that many staff member do not have existing arrangements to care for their families. Mass casualty preparedness will be facilitated if hospitals work with community resources—school systems, churches, and employers—to include in their disaster plan pre-arranged supervision, shelter, and feeding for the families of those working in the hospital. These pre-arranged community support

systems can be activated using public service announcements on radio and television stations.

- Arrangements for the care of the pets of hospital workers can be just as necessary and often more complex. The congregate living arrangements that are possible for family members do not work well for pets. This may provide an opportunity for the veterinary medicine community to contribute to improving hospital preparedness. For example, hospital staff could provide a registry of pets which could be shared with both veterinarians and veterinary assistants for feeding and care if staff are confined to the hospital for extended periods.

- Those who have studied or experienced mass casualty incidents have reported the enormous stress and pressure faced by health workers. Effective response by these workers to the crisis requires that they have the necessary supportive services for themselves. These include access to vaccines, infection control advice, adequate rest and relief, and mental health counseling. In a sustained, mass casualty incident, the inclusion of these resources in the disaster plan will assist staff in meeting the other demands the plan places on them.

- At the onset of the mass casualty incident, there is likely to be confusion and conflicting information about the incident. This lack of certainty may distract hospital workers wishing to understand the risks they personally face in caring for incident victims. The use of universal precautions and a system for sharing information with staff prior to any incident are likely to facilitate implementation of the disaster plan.

- Crowd control will be essential in a mass casualty incident. There will be the sick and injured, relatives searching for each other, the “worried well,” and the curious. To facilitate access to the hospital by physicians, hospital workers, and any “reserve staff” component, preparedness plans must include photo identification cards issued or authorized by the hospital. Prior to any incident, public safety officials must have information on the characteristics of authentic identification cards for each facility in the community. For “reserve staff” and pre-designated volunteers, identification cards can be coded with number and/or letter systems so that public safety officials can readily identify those authorized to cross any crowd control perimeter.

Section 5
Recommendations on Communications

Mass casualty incidents may be sudden, such as explosion, or gradual, such as a biological infection. In both cases, the scale of the incident will create a demand for public information. In most cases, at least some of the information will not be readily available while the incident develops.

We live in a mass media and multi-media culture. Every news and information source will seek access to the latest and most up-to-date information. Absent clear and credible information, speculation may reign and increase the stress and pressure of the incident, especially on the hospital and its staff.

Planned and structured arrangements for communication throughout the incident and during its response are critical components of hospital and community preparedness. Attendees offered the following recommendations and insights:

External communication

- A mass casualty event will become a "Tower of Babel" if every organization in the community attempts to establish its own media briefings. Unaware of what others are saying and despite the best of intentions, the use of different words and phrases will confuse the public and undermine the trust essential to the "orderly chaos" of a well-managed disaster. All organizations involved in the community preparedness plan for mass casualties, including hospitals, need to agree in advance on who will serve as the single, regional spokesperson. If a government official is designated as the spokesperson, health experts must be provided to assist the official with responses to medical questions.

- A community-wide spokesperson system will minimize disruption of hospitals if the press events are conducted away from health care facilities and using regularly scheduled and pre-announced media briefing times.

- All organizations participating in the community preparedness plan will facilitate communications and reduce disruption of their own staff if the plan for a pre-arranged community spokesperson also clearly identifies what others are not to say. While each organization responding to community need will want to "tell its story," a pre-existing agreement that the focus will be on a single point of communication will minimize disruptions while still allowing each organization to "tell its story" after the incident has concluded.

- Hospitals often have established relationships with the local health reporters. In a mass casualty incident, the health reporter may not be the prime media contact. The government reporter, or crime reporter in the case of terrorism, may have the lead on the incident. The community spokesperson needs to be known and trusted by this reporter prior to any incident. Health experts who will be used to complement the spokesperson also should be known in advance to the reporter(s).

- The present language being used by some to describe mass casualty incidents is unnecessarily inflammatory. When addressing potential incidents caused by terrorists, some have used the terms “weapons of mass destruction” or “weapons of mass effect” to characterize the incident. Both of these terms have heavy emotional and psychological overtones which are apt to increase community anxiety and fear in the face of any incident. Attendees encourage the use of more neutral words in communications.

<u>Internal communications</u>

- Hospitals need an ongoing, open channel of communications with emergency response teams who may have first awareness of the incident. In a mass casualty incident, this channel of communications can not be limited to a set of dyads where the EMS unit has to use a different channel or means of contact with each organization. A community-wide network using the same channel is necessary. The network should be tested daily, with the test rotating across the various hospital and EMS shifts. Redundant backup capability must be built into the preparedness plan in case the usual means of communications are ineffective. The backup capability also requires regular testing.

- The arrival of casualties will be accompanied by calls from family and friends seeking to learn where the person is and their condition. These well-meaning calls can rapidly overload the hospital’s telephone system and isolate the hospital. Community-wide mass casualty preparedness plans will improve the responsiveness of health organizations if they include a single, community site for obtaining patient locator information. In many communities, the Red Cross is equipped and experienced in serving as this third-party, off-site source of information.

- A mass casualty incident overloads the resources of the hospital(s) if not the whole community. Staff morale and effectiveness will be facilitated by developing clear information systems that use both telecommunications and a position-to-position cascade in the event

that telecommunications are unavailable or overloaded. Such a cascade should be designated in terms of position, not person. The combination of hospital turnover, the multiple shifts of hospitals, and the reassignment of personnel during the incident have been found to undermine systems where the cascade specified names rather than positions.

Finally, attendees recognize that communication patterns are rapidly changing. The use of cellular phones, pagers, and the internet is increasing. Therefore, attendees recommend that the community-wide preparedness drills addressed in an earlier section of this report be accompanied by a post-event critique and evaluation of the communications plan specifically. To anticipate the communication patterns the public and media will use in the future, hospitals and communities must learn how patterns are changing.

Section 7
Recommendations on Public Policy

In a number of prior observations and recommendations, attendees identified roles for governments. In this fourth priority area, attendees considered specifically the public policy needs that should be addressed by federal, state, and local governments to facilitate hospital preparedness for mass casualty incidents.

A theme that was often heard at the Forum was that mass casualty incidents are community-wide incidents. They are not confined to individual hospitals. They involve hospitals, employers, transportation systems, food and medical suppliers, schools, and more. Despite all the current emphasis on smaller government and market-based solutions to societal problems, attendees believe it is necessary to appreciate that coordination and response to large-scale disasters is a legitimate responsibility of government that is unlikely to be borne by any other entity.

Moreover, the governmental responsibility rests first and primarily on local government. The local community is where the event occurs. Local government provides the "first responders" to explosions, chemical contamination, and natural disasters. Local governments manage the roads and public transportation systems, the school systems, and often the drinking water.

State and federal governments will be involved if the incident is large enough. But, state and federal governments will not lead. They are often outside the immediate area, lack the critical mass of immediate clinical resources, and will be unable to be present immediately.

There are actions in public policy that state and federal governments can take to help communities and hospitals develop and implement preparedness plans. This section provides the recommendations and observations of the Forum attendees.

- In the past two decades, the dual role of the hospital has been under debate. Some see the hospital as a community social institution; others see hospitals as health care businesses and encourage an emphasis on efficiency. Without adjudicating the debate on the hospital's role, attendees believe hospitals need to educate policy makers about the role of hospitals in mass casualty disasters. Hospitals are the last link in the community's response to a mass casualty incident. They are the most comprehensive community health resource. They are open 24 hours a day, 7 days a week, 365 days a year. People turn to the hospital's emergency department when they do not know where else to turn. Hospitals will receive the most seriously injured and ill casualties. Authorities need to acknowledge this role and its implications for preparedness plans.

- This “backstop” role of the hospital is not well appreciated by policymakers. For over two decades, there has been a constant push in the public debate to categorize an empty hospital bed as an “unnecessary” hospital bed. But, hospital beds have been declining. The influenza outbreak of 1999-2000 demonstrated how little excess capacity really remains. In California, the Midwest, and New York City, flu victims found all hospital beds occupied and emergency departments diverting patients because they were full. Attendees believe the recent influenza outbreak should be studied by independent researchers to help society understand the limited excess capacity hospitals have to respond to essential community health needs, especially unpredictable needs like a mass casualty incident.

- Some in the hospital field may feel that the Public Health Department, state or local, should advocate for the reserve bed capacity necessary to address mass casualty incidents. But, health departments are governmental units often unable to advocate publicly for the type of policy issues raised in this section. As the last link in the community chain of readiness, the hospital is the organization which has to make up, by default, for inadequacies in community preparedness. Therefore, hospitals should advocate comfortably for their reserve or readiness needs.

- The first hospital advocacy message should emphasize two themes for government funding: (1) fund the base of mitigation and preparedness functions of hospitals and (2) fund the reserve and readiness capacity essential to implementation. Attendees saw hospital trustees as the key advocates for both of these messages. Hospital trustees represent the broad interests of the community and must balance the multiple needs of the community. Trustees must explain how the present constraints on hospital revenues and the increases in expenses translate into an inability of the hospital to fully fund its preparedness needs.

- Mass casualty incidents and disasters are community events. While hospitals expect to be paid for the health services provided to the injured, there is no stream of funding for the costs of developing preparedness plans, training staff, purchasing standby equipment, and conducting disaster drills. In an era when each purchaser of hospital services, including Medicare and Medicaid, seeks to pay only the price necessary to care for its own patients, there is no general societal support for the preparedness role of the hospital. Government(s) need to develop a fund for hospital preparedness, especially mass casualty preparedness. This may involve a special assessment on industries that pose special risks of nuclear, chemical, or infectious

contamination. General revenue support is also likely to be needed if the health care system is going to be adequately prepared to meet the contingencies of mass casualty incidents.

- There is also a need for state and federal officials to address compensation for communities and hospitals that experience mass casualty incidents. The National Disaster Medical System provides funding if an event occurs in community A and patients from community A are transferred to community B in order to create medical care capacity in community A. But the Stafford Act, which provides the authorization and framework for federal assistance by the Federal Emergency Management Agency, has proven an unreliable source of funds for hospitals in communities experiencing floods, earthquakes, and hurricanes. The Stafford Act is more attuned to providing funds for property damage than for the added costs, or lost revenues, accompanying health services. Attendees recommend that a new federal approach is needed which expresses the Congressional commitment to assist hospitals in disaster recovery. The federal government needs to provide necessary catastrophic financial relief to assist hospitals in caring for disaster victims and in disaster recovery. This funding should recognize economic loss and establish the federal government, perhaps with a cost-sharing role with the states, as a last dollar payer.

- Trustees, medical staff, and hospital executives all need to open the dialogue with the federal government necessary to revise the provisions of the Emergency Medical Treatment and Labor Act. Passed for the purpose of assuring that all individuals who present themselves to the emergency department are evaluated, screened, and stabilized within the capability of the hospital before being transferred from one hospital to another, the Act has been interpreted as requiring every hospital to provide these services to every patient who presents themselves at the hospital. As a consequence, if a community's preparedness plan categorized hospitals into hospitals allowed to accept patients exposed to chemicals and hospitals limited to unexposed patients, the hospital delegated the unexposed patient role would incur an EMTALA violation if it turned away a patient exposed to the chemicals—even if turning the patient away was in the best interest of the community. The hospital designated to accept exposed patient would also incur an EMTALA violation if it did not accept a transfer from a non-designated facility since it would be considered a "higher level of care." Similarly, in a biological incident, an effective community plan may seek to classify hospitals into those accepting exposed patients and hospitals limited to unexposed patients. Implementing the plan would place some of the hospitals in violation of EMTALA. Attendees encourage Members of Congress and

officials of the Department of Health and Human Services to review the EMTALA statute, implementing regulations, and interpretive guidelines and provide a “safe harbor” for hospitals that decline to screen or treat a patient in a mass casualty disaster when public health or local government officials have limited the hospital to patients not exposed to the disaster.

- Finally, as the federal government develops data, privacy, and security standards required by the Health Insurance Portability and Accountability Act (HIPAA), special attention and “safe harbors” need to be created for hospitals responding to mass casualty incidents. Unfortunately, the extraordinary nature of these incidents may require atypical patterns of collecting and maintaining medical information. Special and restricted “safe harbors” should be provided to hospitals, other health care providers, and communities responding to mass casualty incidents. Otherwise, the damage of the incident may be compounded by the inflexibility of the rules and regulations.

Section 8
Conclusions

Throughout this report, there are numerous observations, recommendations, and strategies suggested by attendees to the Invitational Forum on Hospital Preparedness for Mass Casualties at their March 8-9, 2000 meeting. Rather than repeat each of them, this conclusion seeks to highlight some fundamentals.

Community Wide Preparedness

- By definition, mass casualty incidents overwhelm the resources of individual hospitals. Equally important, a mass casualty incident is likely to impose a sustained demand for health services rather than the short, intense peak customary with many smaller scale disasters. This adds a new dimension and many new issues to preparedness planning for hospitals.

- Hospitals, because of their emergency services and 24 hour a day operation, will be seen by the public as a vital resource for diagnosis, treatment, and followup for both physical and psychological care.

- Hospital preparedness for disasters has focused historically on a narrow range of potential incidents. To increase their preparedness for mass casualties, hospitals have to expand their focus to include both internal and community-level planning.

- Traditional planning has not included the scenario in which the hospital is the victim of a disaster and may not be able to continue to provide care. Hospital planners should consider the possibility that a hospital might need to evacuate, quarantine, or divert incoming patients.

- There are limited data on hospital emergency capabilities. In multi-hospital communities and regions there is a need to develop a real-time database, including an unduplicated count of potential staff .

Staffing

- Preparedness will be enhanced by development of a community-wide concept of “reserve staff” identifying physicians, nurses and hospital workers who are (1) retired, (2) have changed careers to work outside of healthcare services, or (3) now work in areas other than direct patient care (e.g., risk management, utilization review). While developing the list of candidates for a community-wide “reserve staff” will require limited resources, the reserve staff concept will only be viable if adequate funds are available to regularly train and update the reserves so that they can

immediately step into roles in the hospital which allow regular hospital staff to focus on incident casualties.

- Hospital preparedness can be increased if state licensure bodies, working through the Federation of State Medical Boards, develop procedures allowing physicians licensed in one jurisdiction to practice in another under defined emergency conditions. Nursing licensure bodies could increase preparedness by adopting similar procedures or by adopting the "Nursing Compact" presently being implemented by several states.

- Hospital preparedness can be increased if medical staff Credentials Committees develop a policy on the recognition of temporary privileges in emergency or disaster situations and if hospitals in a community regularly share lists of the medical staffs and their privileges.

Communications

- Everyday communications systems used in the community are likely to be overwhelmed in a mass casualty incident. Backup and redundant systems need to be developed, tested and drilled.

- A single community spokesperson for the mass casualty incident needs to be identified in advance, press and media briefings need to be regularly scheduled away from the hospital(s) but with supporting medical expertise.

- Community-wide systems for locating patients need to be planned with a single point of contact.

Public Policy

- There is no financial framework for funding hospital preparedness and mass casualty costs. In the present financial environment, where each payer wished to pay only for the immediate costs of its patients, there is a need for a means to pay for the planning, education, standby supply, and training costs of preparedness.

- The Emergency Medical Treatment and Labor Act needs to be refined to establish "safe harbor" provisions so that a hospital assigned a role of caring for unexposed patients does not have to violate either its status as a "clean" facility or its EMTALA obligation.

- The Stafford Act, which provides the authorization and framework for federal assistance by the Federal Emergency Management Agency, has proven an unreliable source of funds for hospitals in communities experiencing floods, earthquakes, and hurricanes. The Stafford Act is

more attuned to providing funds for property damage than for the added costs, or lost revenues, accompanying health services. A new federal approach is needed which expresses the Congressional commitment to assist hospitals in disaster recovery. The federal government needs to provide necessary catastrophic financial relief to assist hospitals in caring for disaster victims and in disaster recovery. This funding should recognize economic loss and establish the federal government, perhaps with a cost sharing role with the states, as a last dollar payer.

Finally, hospital preparedness can be increased more rapidly if standardized but scalable national resources for staff training, building design, and facilities operations are developed and widely disseminated.

Appendix A

Attendee List

Invitational Forum on
Hospital Preparedness for Mass Casualties
March 8-9, 2000

Michael Anderson
Program Coordinator
Office of Emergency Preparedness
U.S. Department of Health and Human Services
Twinbrook Metro Plaza
Suite 360
12300 Twinbrook Parkway
Rockville, MD 20850

Joseph Barbera, MD
Institute for Crisis, Disaster and Risk Management
George Washington University
2140 Pennsylvania Avenue, NW
Washington, DC 20037

John Bartello
Director Environmental Service
Skiff Medical Center
204 N Fourth Ave East
Newton, IA 50208

Bryant Broder, CSPDT
Manager Surgical Processing
Saint Mary's Health Services
200 Jefferson Avenue SE
Grand Rapids, MI 49503-4502

John Clizbe
Vice President, Disaster Services
American Red Cross
8111 Gatehouse Road
Falls Church, VA 22042

Brian Colfack
President and CEO
Berger Health System
600 N. Pickaway Street
Circleville, OH 43113

Bob Dooley
Senior Associate
NBBJ
111 South Jackson
Seattle, WA 98104

Steve Ennis, CHSP, CFPS
Program Administrator
The Reciprocal Group
P.O. Box 85058
Richmond, VA 23285-5058

Patrick Finnegan
Director of Clinical, Administration and Emergency Services
Metropolitan Chicago Hospital Council
19th Floor
222 S. Riverside Plaza
Chicago, IL 60606

Bruce Flanz
Executive Vice President & COO
Jamaica Hospital Medical Center
8900 Van Wyck Expressway
Jamaica, NY 11418

Carlton Green, Ph.D.
Director, Department of Nutrition
UCLA Medical Center
10833 Le Conte Avenue
B3-315, CHS
Los Angeles, CA 90095-1661

Leon L. Haley, Jr. MD, MHSA
Chief of Service, Emergency Medicine
Grady Health System
80 Butler Street
P.O. Box 26103
Atlanta, GA 30335-3801

Judy C. Jones
Director of Nursing Education and Director of Nurse Recruitment Retention
Parkland Health and Hospital System
5201 Harry Hines Boulevard
Dallas, TX 75235

Robert Knouss, PHS MD
Director, Office of Emergency Preparedness
U.S. Department of Health and Human Services
Twinbrook Metro Plaza
Suite 360
12300 Twinbrook Parkway
Rockville, MD 20857

Kristi Koenig, MD
Chief Consultant
Emergency Management Strategic Health Care Group
Veterans Health Administration
VA Medical Center
Martinsburg, WV 25401

Barbara Lightizer
Director of Performance Improvement and Risk Management
St Elizabeth's Medical Center
Boston, MA 02135

Scott Lillibridge, MD
Director
Bioterrorism Prepareness and Response Program
Centers for Disease Control and Prevention
1600 Clifton Road
Mail Stop C-18
Atlanta, GA 30333

Robert Malson
President
District of Columbia Hospital Association
Suite 700
1250 Eye Street, NW
Washington, DC 20005-3930

Paul Nannis
Director, Office of Planning, Evaluation & Legislation
U.S. Department of Health and Human Services
Health Resources and Services Administration
5600 Fishers Lane, Room 14-33
Rockville, MD 20857

Claudia Niersbach, RN, J.D.
Director of Education
Emergency Nurses Association
915 Lee Street
Des Plaines, IL 60016

Jane Oehm
Trustee
Exempla Healthcare
982 Sleepy Hollow Road
Golden, CO 80901

Tara O'Toole, MD
Center for Civilian Biodefense Studies
Johns Hopkins University
Chandler Building, Suite 850
111 Market Place
Baltimore, MD 21202

Gerard D. Robilotti
Executive Vice President
Danbury Health Systems
24 Hospital Avenue
Danbury, CT 06810

Jeffrey Rubin
Chief of Disaster Medical Services
California EMS Authority
1930 9th Street
Sacramento, CA 95814

Dennis R. Schrader
Vice President, Project Planning and Development
University of Maryland Medical System
22South Green Street
Baltimore, MD 21201

John Taylor
Vice President, Public Relations and Advertising
Intermountain Health Care
36 South State Street, 22nd Floor
Salt Lake City, UT 84111

Laurita Thomas
Administrator, Human Resources, Safety and Occupational Health
University of Michigan Health Systems
300 North Ingalls,
N18B15B-0420
Ann Arbor, MI 48109

CDR Kevin Tonat, Dr.P.H., M.P.H.
Acting Director, Division of Program Development
Office of Emergency Preparedness
U.S. Department of Health and Human Services
Twinbrook Metro Plaza
Suite 360
12300 Twinbrook Parkway
Rockville, MD 20852

Sharon Welbel, MD
Cook County Hospital
1835 West Harrison Street
Chicago, IL 60612

Tom Wildsmith
Policy Research Actuary
Health Insurance Association of America
555 13th Street, NW
Suite 600 East
Washington, DC 20004

CAPT Thad Zajdowicz, MD, MC, USN
JTF-CS
1562 Mitscher Avenue
Suite 200
Norfolk, VA

AHA STAFF

Carl Armstrong, MD
Senior Medical Advisor
American Hospital Association and
Virginia Hospital and
Healthcare Association
P.O. Box 31394
Richmond, VA 23294-1394

James Bentley
Senior Vice President for Strategic
Policy Planning
American Hospital Association
Suite 700
325 Seventh Street, NW
Washington, DC 20004-2802

Susan McLaughlin
SBM Consulting
229 Whitney Drive
Barrington, IL 60010

Maureen Mudron
Washington Counsel
American Hospital Association
Suite 700
325 Seventh Street, NW
Washington, DC 2004-2802

Roslyne Schulman
Senior Associate Director for Policy
Development
American Hospital Association
Suite 700
325 Seventh Street, NW
Washington, DC 20004-2802

Richard Wade
Senior Vice President for Strategic
Communications
American Hospital Association
Suite 700
325 Seventh Street, NW
Washington, DC 20004-2802

Appendix B

Agenda

Invitational Forum on
Hospital Preparedness for Mass Casualties
March 8-9, 2000

Purpose of Invitational Forum:

To develop recommendations and strategies about mass casualty preparedness for hospitals, the American Hospital Association, and the HHS Office of Emergency Preparedness

Wednesday, March 8, 2000

Objectives: To introduce participants to each other
To develop a shared understanding for the meeting

Thursday, March 9, 2000

Session 1
Objective: Create a shared baseline for addressing preparedness

Morning Orientation

Discussion: What are the primary roles for hospital involvement in mass casualty incidents?

Presentation: What are the current JCAHO standards for preparedness?

Discussion: What is the current preparedness status of hospitals for mass casualty incidents?

Discussion: What language/words facilitate voluntary preparedness?

Session 2
Objective: A "brainstorming" session to identify the major clinical and non-clinical issues to address in hospital preparedness for mass casualties

Session 3
Objective: Compilation of a priority list of issues to address

Discussion: What are the “show stoppers” that will bring everything to a halt if not addressed in preparedness plans?

Session 4
Objective: Development of recommendations and strategies to increase and facilitate hospital preparedness

What practical guidelines should be prepared and distributed to hospital leaders for their use in increasing preparedness for mass casualty incidents?

What strategies will increase hospital awareness of mass casualty incidents without unnecessarily increasing public anxiety? What steps can be taken to increase the awareness of medical professionals and administrators?

What are the existing barriers to hospital preparedness for mass casualty incidents? How can government(s) help remove them?

What steps can the Federal Government take to remove barriers and/or provide tools to facilitate hospital preparedness?

Given the increasingly fragile status of hospital finances and the multiple competing demands for new initiatives, what financial incentives can the Federal Government provide to increase hospital readiness for mass casualties?

Resource and References

Invitational Forum on Hospital Preparedness for Mass Casualties March 8-9, 2000

Caro, Denis. "Towards Integrated Crisis Support of Regional Emergency Networks," *Health Care Management Review* 24:4 (Fall 1999), 7-19.

Environmental Protection Agency. EPA's Role and Authority in Counter Terrorism. April 7, 1999.

Henderson, D.A et al
"Anthrax as a Biological Weapon," *JAMA*, May 12, 1999 (1735-1745).
"The Looming Threat of Bioterrorism," *Science*, February 26, 1999 (1279-1282).
"Smallpox as a Biological Weapon" *JAMA*, June 9, 1999 (2127-2137).

Joint Commission on the Accreditation of Healthcare Organizations. "Standard EC.1.6: Emergency Preparedness Plan."

Inglesby, Thomas V. "Anthrax: A Possible Care History," *Emerging Infectious Diseases*, 5:4 (July-August 1999), 556-560.

Institute of Medicine Committee on R&D Needs for Improving Civilian Medical Response to Chemical and Biological Terrorism Incidents. "Executive Summary," *Chemical and Biological Terrorism*. Washington, DC: National Academy Press, 1999.

Johnson, James A. "Interview with Brigadier General Donna F. Barbisch, Senior Advisor to the Biological Warfare Improve Response Program," *Journal of Healthcare Management*, 44:4 (September/October 1999), 329-334.

Koenig, Kristi; Dinerman, Norm, and Kuehl, Alexander. "Disaster Nomenclature—A Functional Impact Approach: The PICE System," *Academic Emergency Medicine*, (1996), 723-727.

Macintyre, Anthony G et al. "Weapons of Mass Destruction with Contaminated Casualties: Effective Planning for Health Care Facilities," *JAMA*, 283:2 (January 12, 2000),

Occupational Safety and Health Administration, Department of Labor. "Hazardous Waster Operations and Emergency Response" Fact

Sheet 93-31, 1993.

O'Toole, Tara. Congressional Testimony.September 22, 1999

O'Toole, Tara and Inglesby, Thomas. "Hospital Response to Bioterrorism: Briefing Paper. Photocopied, no date. Baltimore: Johns Hopkins University Center for Civilian Biodefense Studies.

Stein, Aimee. "Bioterrorism: It could happen here." *Hospitals and Health Networks,* (January 1, 2000).

Waeckerle, Joseph F. "Domestic Preparedness for Events Involving Weapons of Mass Destruction," *JAMA,* 283:2 (January 12, 2000).

Appendix D

JCAHO Standards

Emergency Preparedness Management Plan

Standard

EC.1.6 A management plan addresses emergency preparedness.

Intent of EC.1.6

The emergency preparedness management plan describes how the organization will establish and maintain a program to ensure effective response to disasters* or emergencies affecting the environment of care. The plan provides processes for

a. implementing specific procedures in response to a variety of disasters;
b. defining and, when appropriate, integrating the organization's role with community-wide emergency preparedness efforts;
c. notifying external authorities of emergencies;
d. notifying personnel when emergency response measures are initiated;
e. assigning available personnel in emergencies to cover all necessary staff positions;
f. managing space, supplies, and security;
g. evacuating the facility when the environment cannot support adequate patient care and treatment;
h. establishing an alternative care site when the environment cannot support adequate patient care; and
i. managing patients during emergencies, including scheduling, modification, or discontinuation of services, control of patient information, and patient transportation.

The plan identifies

j. an alternative source of essential utilities;
k. a backup communication system in the event of failure during disasters and emergencies;
l. facilities for radioactive or chemical isolation and decontamination;
m. alternate roles and responsibilities of personnel during emergencies; and

The plan establishes

n. an orientation and education program for personnel who participate in implementing the emergency preparedness plan. Education addresses
    1. specific roles and responsibilities during emergencies,
    2. the information and skills required to perform duties during emergencies,
    3. the backup communication system used during disasters and emergencies, and
    4. how supplies and equipment are obtained during disasters or emergencies;

o. performance improvement standards that address one or more of the following
    1. Emergency preparedness knowledge and skills for staff;
    2. The level of staff participation in emergency preparedness management;
    3. Monitoring and inspection activities;
    4. Emergency and incident reporting procedures that specify when and to whom reports are communicated;
    5. Inspection, preventive maintenance, and testing of applicable equipment;
    6. Use of space;
    7. Replenishment of supplies; or
    8. Management of staff; and

p. how an annual evaluation of the emergency preparedness safety management plan's objectives, scope, performance, and effectiveness will occur.

Reprinted with permission: Joint Commission: *Comprehensive Accreditation Manual for Hospitals.* Oakbrook Terrace, IL: Joint Commission on the Accreditation of Healthcare Organizations, January 1998.

Appendix E

JCAHO Standards
Security Management Plan

Standard

EC.1.4 Management plan addresses security.

Intent of EC.1.4

A security management plan describes how the organization will establish and maintain a security management program to protect staff, patients, and visitors from harm. The plan provides processes for

a. leadership's designation of personnel responsible for developing, implementing, and monitoring the security management plan;
b. addressing security issues concerning patients, visitors, personnel, and property;
c. reporting and investigating all security incidents involving patients, visitors, personnel, or property;
d. providing identification, as appropriate, for all patients, visitors, and staff;
e. controlling access to and egress from sensitive areas, as determined by the organization; and
f. providing vehicular access to urgent care areas.

In addition, the plan establishes

g. a security orientation and education program that addresses:
    1. processes for minimizing security risks for personnel in security sensitive areas;
    2. emergency procedures followed during security incidents; and
    3. processes for reporting security incidents involving patients, visitors, personnel, and property;
h. performance improvement standards that address one or more of the following
    1. staff security management knowledge and skill;
    2. the level of staff participation in security management activities;
    3. monitoring and inspection activities;
    4. emergency and incident reporting procedures that specify when and to whom reports are communicated; or
    5. inspection, preventive maintenance, and testing of security equipment; and
i. emergency security procedures that address
    1. actions taken in the event of a security incident or failure,
    2. handling of civil disturbances,
    3. handling of situations involving VIPs or the media, and

4. provision of additional staff to control human and vehicle traffic in and around the environment of care during disasters; and

j. how an annual evaluation of the security management plan's objectives, scope, performance, and effectiveness will occur.

Appendix F

JCAHO Standards
Hazardous Materials and Waste Management Plan

Standard

EC. 1.5 A management plan addresses control of hazardous materials and waste.*

Intent of EC.1.5

A hazardous materials and waste management plan describes how the organization will establish and
maintain a program to safely control hazardous materials and waste. The plan provides processes for

a. selecting, handling, storing, using, and disposing of hazardous materials and waste from receipt or generation through use or final disposal;
b. establishing written criteria consistent with applicable law and regulation, to identify, evaluate, and inventory hazardous materials and waste used or generated;
c. managing chemical waste, chemotherapeutic waste, radioactive waste, and regulated medical or infectious waste, including sharps;
d. monitoring and disposing of hazardous gases and vapors;
e. providing adequate and appropriate space and equipment for safe handling and storage of hazardous materials and waste; and
f. reporting and investigating all hazardous materials or waste spills, exposures, and other incidents.

In addition, the plan establishes

g. an orientation and education program for personnel who manage or have contact with hazardous materials and waste that addresses
    1. precautions for selecting, handling, storing, using, and disposing of hazardous materials and waste;
    2. emergency procedures for hazardous material and waste spills or exposure;
    3. health hazards of mishandling hazardous materials; and
    4. for all appropriate personnel, orientation and education about reporting procedures for hazardous materials and waste incidents, including spills or exposures;
h. performance improvement standards that address one or more of the following:
    1. Staff knowledge and skill necessary for their role in managing hazardous materials and waste;
    2. The expected level of staff participation in materials and waste management activities;

3. Monitoring, inspection, and corrective action;
4. Routine procedures for emergency and incident reporting that specify when and to whom reports are communicated; or
5. Inspection, preventive maintenance, and testing of applicable equipment;

i. emergency procedures describe the specific precautions, procedures, and protective equipment used during hazardous material and waste spills or exposures; and
j. how an annual evaluation of the hazardous materials and waste-management plan's objectives, scope, performance, and effectiveness will occur.

Appendix G

JCAHO Standards
Emergency Preparedness Drills

Standard

EC.2.9 Drills are regularly conducted to test emergency preparedness.

Intent of E. C.2.9

The emergency preparedness plan is executed twice a year, either in response to an emergency or in planned drills. Organizations that offer emergency services or are designated as disaster receiving stations perform at least one exercise yearly that includes an influx of volunteer or simulated patients. Exercises are conducted at least four months apart and no more than eight months apart.

Suggested Issues for Hospital Mass Casualty Preparedness

To identify the potential issues and priorities for mass casualty preparedness, attendees brainstromed the following list of issues.

An adequate supply of food and water for staff, patient, and families in a time when normal supply patterns may be interrupted.

Management of a large number of fatalities, including awareness of and respect for religious customs.

Coordination of volunteers

Adequate, advanced staff education, including identification of who needs training, who provides training, who pays for training. Training must include recognition of the spectrum of causal agents and their respective treatments.

Setting priorities for high yield and low yield activities

Coordination of regional resources to assure that hospitals are not “double counting” the same contingency suppliers.

Coordination of media relations. If not well done, media will detract from the need for focus. This will require coordination with others who will speak to the media also and education of media representatives before any event occurs.

Open and reliable communication across the community to enable monitoring of big picture.

Governing body appreciation of the need for a plan and of the importance of maintaining a connection to community.

A common, widely used nomenclature and definitions of “disasters” permitting communication across agencies, organizations, and communities.

Established logistics, especially patient and equipment transportation.

A staff augmentation plan, especially for a prolonged crisis.

Stockpiling of supplies so that they are readily available.

Mental health intervention at the incident and in follow-up and recovery.

Advanced, ethical guidelines and policies for triage of patients, supplies, and drugs. In the military, the triage concept is focused on making decisions to facilitate completing the mission. In the civilian community, triage has traditionally meant treating the most injured first. In a mass casualty incident, it may be necessary to use a triage approach more similar to the military's definition that the traditional civilian one. Moreover, depending upon the duration and pattern of the incident, the definition of triage may change over time.

A biological incident may initially manifest itself with vague symptoms. What is threshold for dissemination or sharing of early results? There must be a balance between early identification of incidents and not undermining public confidence with false positives.

How are hospitals going to have the resources to spend on preparedness when their current operational experience is declining revenue and increasing expense.

Need to establish an inventory successful practices. Hospital associations could inventory members. There is less legal resistance if inventory is of factual information rather than judgmental information.

Integration of support staff from non-traditional sources. For example, can nurses who work in physician offices be used to supplement hospital staff? Can technicians and technologists in "freestanding" clinical laboratories be used in the hospital laboratory?

Isolation of air handling systems so that airborne contaminants are not spread throughout the hospital or exhausted into the community.

Why should the hospital bear the costs of preparedness for events that originate outside its campus? If it is public policy to encourage hospitals to reduce costs and maximize productivity, why should CEO take long/large view? Should industries in a community that pose a mass casualty risk have to contribute to a fund to underwrite community preparedness, including hospital preparedness?

In a terrorist incident, the hospital is performing a government service. Should there be a public source of funds for both preparedness and implementation of a plan in response to terrorism?

Clear policies in the community and at the hospital of who is in charge. Ready access to the list of who is in charge. The list must include redundancy to provide coverage for vacation, business and personal travel, and other contingencies.

Recognition that a mass casualty event depends primarily on a local response.

Clear roles and coordination of the response triangle: fire, police, and medical services.

The development of large, geographically dispersed health systems has moved hospital governance and management outside of local communities. This makes it more difficult to obtain approval for disaster planning.

Space and facilities for handling a large volume of patient.

Identification of educational resources on the awareness of the several mass casualty threats.

The weak relationship between many hospitals and health departments.

The weak relationship between many hospitals and community health centers.

The needs for hospital leaders to look beyond their institution in order to develop and appropriate plan and allocation of resources. This may necessitate some anti-trust guidelines that provide “safe harbors” for collaborative actions across facilities in a community.

Communications with media, especially when information is incomplete on cause or response. Clear agreements on who will coordinate? Avoidance to the media’s “divide and conquer” tactic. Community-wide agreement not to speculate when facts remain unknow.

Outbreak control

A plan for a backup strategy when hospitals are at capacity.

Coping with and addressing ethnic and religious customs for diets, death, and burial.

Funding for mass casualty preparedness, especially in financially vulnerable hospitals

Need a preparedness plan template for mass casualty plan to download and customize.

Fatalities resulting from the incident may be seen as “evidence” by the law enforcement community. This will result in religious and family conflicts.

Conflict in culture between health care organizations, law enforcement, and media organizations. Health care is based on the premise of open communications with the assumption of honest, if incomplete, information. Law

enforcement organizations often question every source and consider every action suspicious. The media seeks to probe and question. In this triangle of cultures, each party questions the behaviors of the other two.

The public sees terrorism as an “act of war” but doesn’t want their health insurer to deny claims under a war exclusion provision.

Recognition that in a complex, sustained incident with mass casualties, there are multiple tiers of command-communications-control-computers-and intelligence (C4I in military terminology).

Management of fear, prejudice, and hatred among providers.

Need for real-time data to inform public and maintain their trust.

Temporary or “bridge” funding to make emergency purchases, especially when alternative vendors must be used.

Plan for tapping into wider network of professionals beyond the local community.

Sustaining competence in disaster skills. Hospital employee turnover in many communities ranges from 16-20% annually. What is the feasibility of rapid re-education of new staff?

Database for community and regional capacity of facilities, staff, supplies, local experts, etc.

Protecting the safety of staff. How do they get into facilities? Who get past crowd control?

CDC has a national pharmaceutical stockpile. What is the hospital role in distribution? Are there standing priorities determined in advance of any incident? How does a community recognize and define the “at risk” population? What will be the health rules for allocations of the stockpile versus the politics?

What can be learned from incidents like the 1999/2000 influenza experience?

What are the best strategies for information management of medical records, patient tracking, confidentiality, and cyberterrorism?

What if the hospital is site of event?

Cellular phone systems often have build-in but unknown priorities for access in overload situations. Will the hospital and health providers be given priority during a mass casualty incident?

Licensure of medical and nursing personnel is geographic. Need a system of emergency credentialing to allow personnel to cross-state lines in a mass casualty situation.

Plans for auxiliary treatment facilities

An inventory of laboratory preparedness which may be used during a mass casualty incident.

Wide communication of the effectiveness of biological prophylaxis

Vehicles for transportation. Need equipment and directions for out-of-town personnel who arrive to supplement local resources.

Facility protection from contamination and crowds.

Effective regional mutual aid across communities for supplies, equipment, and staff privileges.

Methods to locate loved ones

Decontamination facilities

Toolbox of options and costs so that every hospital and community doesn't have to "reinvent the wheel."

Positive relationships with media

Political policy to get plans implemented

Security and crowd control

Reasonable interpretations of regulations by OSHA and EPA

Addressing denial (i.e., it won't happen here) throughout the community.

"Just-in-time" inventory systems limit ability to respond.

If facilities are regularly well maintained and serviced, they will be able to respond more readily to the atypical and instant demands of an incident. Physical plans staff must be included in any preparedness plan.

An inventory of non-health private industry that could support health care providers during an incident.

The identification of quarantine facilities available for use during a biological incident.

A contingency plan for an incident with no effective treatment.