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Chapter Two
Emergency Preparedness Program

The emergency preparedness program has the primary function of preparing the hospital to respond effectively and quickly to emergencies that occur within the community or within the hospital itself. Good management practice dictates the development of such a program, and applicable codes and standards establish minimum criteria that must be satisfied for continued accreditation. This section reviews the applicable regulatory requirements and discusses the organizational and staffing resources within the hospital that will ensure an effective emergency preparedness program.

Rules and Regulations

In preparing an emergency preparedness program it is important to understand the rules and regulations under which the program's existence is mandated. Planning for emergency preparedness at a hospital requires an understanding of the institution's needs, organization, strengths, and limitations. The object of the planning effort is to combine the regulatory requirements with the realities of facility operations into a plan and procedures that are understandable and easily performed. The success of this integration will determine the success of the hospital in meeting an emergency.

Although each hospital and community is unique, a standard set of requirements forms the core of all emergency preparedness planning. These include, but are not limited to, the following:

- Current JCAH *Accreditation Manual for Hospitals*
- National Fire Codes (especially Life Safety Code 101 and NFPA 99)
- The community emergency preparedness plan
- Community fire and sanitation ordinances
- Pertinent state and federal regulations

The 1986 JCAH *Accreditation Manual for Hospitals* identifies the basic requirements for the emergency preparedness program in Section 15, Plant, Technology, and Safety Management. Standard 15.5 states:

> "The hospital has an emergency preparedness program designed to provide for the effective utilization of available resources so that patient care can be continued during a disaster."

The key features of the characteristics are shown in the following outline:

	Basic Requirement	*Key Features*
15.5.1	Plan addresses both internal and external disasters	If designated by local authority (Civil Defense, Fire Department) as disaster emergency center
15.5.2	Plan is concise and documented	Addresses the following: 1. Effective utilization of available resources 2. Minimizes consequences of disaster

		3. Pertinent to a variety of disasters 4. Based on hospital capabilities and limitations
15.5.3	Role of hospital in community plan is identified	
15.5.4	Plan addresses facility preparedness	1. Space utilization 2. Supplies 3. Communication system 4. Security 5. Utilities
15.5.5	Addresses staff preparedness	1. Staffing requirements 2. Designates roles and functions within the scope of item 15.5.4.
15.5.6	Addresses patient management	1. Modified schedules for staff 2. Criteria for stopping nonessential services 3. Determines patient transfer, particularly discharge and relocation
15.5.7	Program/Plan must be implemented	1 Semiannually 2. Exercise facility, staff, patient management; one drill must have influx of patients from the outside 3. Document problems identified during the drill, corrective action taken, and staff participation
15.5.8	There is a Fire Plan	1. Addresses: a. use/function of fire alarm and system b. containment of fire c. protection of lives by transfer, evacuation, or fire extinguishment 2. Each shift has trained staff for exercise of nonautomatic components of fire safety system 3. Exercise quarterly on each shift for each patient-occupied building 4. Document problems noted during drill, corrective action, and staff participation
15.5.9	Hospital employees and staff are provided with education in elements of the emergency preparedness plan and fire plan	
15.5.10	The emergency preparedness plan is evaluated annually and updated as needed	

Standard 15.5 is the basic standard for development and planning; however, there are references to emergency preparedness in most of the JCAH plant, technology,

and safety standards. These references are not always obvious, but can be cited during a survey. They include:

	Basic Requirement	*Key Features*
15.2.2.1	Grounds	There is a policy that addresses access to emergency care areas by vehicles.
15.8.3.1	Communication	Where equipment/system failure could be life-threatening, an alternative system is available. Should be documented.
15.11.3	Electrical	Written procedures specify action to take during failure of essential equipment, systems, or sources.
15.13.4	Vertical/Horizontal Transport	Written procedures specify action to be taken in the event of equipment failure, including evacuation of passengers and labeling of emergency shutoff controls.
15.14.7	HVAC	Written procedures of action to take during equipment or system failure.
15.15.4	Plumbing	Written procedures of action to take during failure of essential equipment, systems, or water supply sources. Must include provisions for obtaining and distributing emergency water supplies.
15.16.4	Boiler	Written procedure of action to be taken during equipment or system failure.
15.17.3	Nonflammable Medical Gases	Written procedure of action to take during equipment or system failure including provision for obtaining and distributing emergency supplies.
15.18.4	Medical/Surgical Vacuum Systems	Written procedure of action to take during failure of essential equipment or system.

Teamwork and Staffing

For successful development of the emergency preparedness program, people must be involved at every level and part of the hospital organization. They must have, or develop, a sense of ownership of the program that comes only from participation. There is no way to develop and maintain an effective emergency preparedness program other than to involve people and to instill in them pride in their accomplishments.

The emergency preparedness manager must believe in the program, show enthusiasm for what is being done, and never miss an opportunity to expand on this commitment to the very best program. This enthusiasm will attract other people to the program. By making them responsible for parts of the program they will identify more strongly with the program and will make the emergency preparedness manager's job easier. They must be given the freedom to create, yet be held responsible for what they do create.

Use the concept of "small wins" to get people involved. Don't try to create or completely change the program overnight. Have people give suggestions for change and, whenever possible, incorporate those changes promptly. This becomes a small victory for the emergency preparedness manager and for them. They become more attached to the program, the program gets the benefit of their input, and everyone has a sense of direction and accomplishment.

The hospital is a community composed of many unique and special people, departments, and equipment. But the most successful hospitals are those that recognize that the hospital is a family. The effective emergency preparedness program recognizes this family and builds upon its natural strengths. The emergency preparedness team is made up of three parts:

- The individual responsible for the overall program
- The disaster committee
- The hospital and medical staff

Responsible Individual

Within every hospital there is usually a single individual charged with overall responsibility for the emergency preparedness program. The position of the emergency preparedness manager is typically an adjunct assignment. Often, the emergency preparedness manager has a primary assignment as risk manager, safety director, director of nursing, plant engineer, emergency department director, or assistant administrator for administration. The emergency preparedness manager's other day-to-day responsibilities compete for time with the emergency preparedness functions. Regardless of other assignments, emergency preparedness managers must have the time, resources, and delegated authority to fulfill the emergency preparedness responsibilities, including interactions with and support from the disaster committee, safety committee, security, administration, and many others.

The emergency preparedness manager's role is to prepare the hospital through planning and training to deal with an external or internal crisis. Specifically, the activities the emergency preparedness manager is responsible for include the following:

- Prepare and maintain the disaster plan
- Coordinate preparation, maintenance, and training for implementing emergency instructions
- Conduct emergency training, drills, and exercises
- Maintain records of simulated or actual emergencies
- Coordinate with external emergency organizations—fire, police, health, local and state emergency planning agencies
- Provide in-house expertise on regulatory requirements, resources, and activities
- Direct initial emergency response in an actual emergency
- Manage field operations
- Coordinate disaster control center activities
- Chair disaster committee

To be most effective, the emergency preparedness manager must be given sufficient authority to accomplish the job. This authority may come from the president of the hospital or from the disaster committee, but it should be in writing. The delegation of authority should clearly identify the functions the emergency preparedness manager is to perform before, during, and after an emergency, and should acknowledge relationships with the hospital administration, individual departments, and community organizations. It should include:

- Scope of responsibility
- Scope of authority

- Limits of authority
- Authority to cross departmental boundaries

The ideal emergency preparedness manager must be able to organize and solve complex problems, motivate and interact well with people, and communicate effectively. Other essential characteristics and abilities are listed below:

- Well organized
- Creative—ability to imagine "what if"
- Innovative
- Good interpersonal skills
- Good oral and written communication skills
- Commands respect
- Good mediator
- Intelligent
- Knowledgeable of hospital organization and personalities
- Ability to process and integrate technical information of many disciplines
- Diplomatic
- Confident, but not cocky
- Goal-oriented
- Team-oriented
- Achiever—able to motivate people to get things accomplished

Disaster Committee

The disaster committee is a primary resource, providing support and guidance to the emergency preparedness manager. It should operate at a decision-making level within the hospital organization. Its primary duties include the following:

- Recommending emergency preparedness policies to the hospital administrator and providing policy guidance to the emergency preparedness manager
- Providing policy oversight and integrated technical inputs to the disaster plan and its periodic updates
- Providing policy oversight and technical assistance to the emergency preparedness manager on the development and conduct of training, drills, and exercises
- Assisting in the coordination with public and private emergency (disaster) response organizations outside the hospital

The disaster committee plays an important role in serving as liaison between the emergency preparedness manager and the individual staff members, ensuring the free flow of information between the emergency preparedness manager and the hospital staff. The disaster committee provides liaison, guidance, and support to the emergency preparedness manager on a continuing basis.

The disaster committee should consist of the following persons:

- Representatives from all departments essential for the hospital to continue functioning
- Resource personnel with technical expertise
- Senior management representative

The essential functions that should be represented on the disaster committee include:

- Medical staff
- Nursing administrator
- Facility engineer
- Housekeeping services

- Food service administrator
- Emergency department administrator or triage officer
- Security
- Risk management or legal advisor
- Public affairs
- Communications
- Pharmacy—lab
- Safety director
- Senior management representative
- Outside agencies such as civil defense, police, fire

Note: A single individual may cover more than one function.

The size of the disaster committee is not as important as the functions represented on the committee and the ability of team members to work together. The disaster committee chairman must maintain control of the meetings and set an attitude of professionalism and accomplishment. The chairman must always be prepared for the meetings and show enthusiasm for the job.

To facilitate the accomplishment of the various tasks, it is recommended that the disaster committee be supported by subcommittees. Each subcommittee should consist of five or fewer people, and should be formed to address a specific topic or problem. The life span of each subcommittee should be limited, with a specific time given for them to accomplish their task. Subcommittees could be formed for the following tasks:

- Review and revision of the disaster plan
- Development of exercise scenario
- Evaluation of exercise
- Development or oversight of training programs
- Creation of public information materials
- Review of hospital emergency preparedness policies
- Interaction with community organizations
- Creation of disaster committee programs

Each subcommittee should have a chairman, should maintain minutes of its meetings, and should make both oral and written reports to the disaster committee. Subcommittees are an excellent vehicle to involve personnel who work on the evening and night shifts. People who work on those shifts have different impressions of the hospital, and their input is very important in creating a comprehensive emergency preparedness program.

The disaster committee should meet monthly, with a general program schedule prepared at the beginning of the new year, and a focused agenda for each meeting. Individual monthly topics to be addressed might include:

- Review and update of disaster plan
- Training programs—initial and refresher
- Semiannual exercises
- Fire drills
- Public information materials
- JCAH survey
- Table-top exercise
- Specific programs such as security, fire protection, hazardous waste, use of volunteers

Hospital and Medical Staff

Individual hospital and medical staff members are the third vital component of the emergency preparedness team. They are the ones who will actually respond to the

disaster in accordance with the hospital's policies and plans. In this context, "hospital staff" is everyone from the administrator to volunteers.

To obtain their suggestions and to increase their understanding, members of the hospital staff should be made an active part of the emergency preparedness team whenever possible. This may be done in a number of ways, including the following:

- Serving on disaster committee subcommittees
- Assisting in the development of exercise scenarios
- Acting as evaluators during exercises
- Obtaining information and suggestions from staff on the evening and night shifts
- Actively recruiting staff comments on plans, procedures, training, drills, and other programs

During the initial and in-service training given to every employee, physician, and volunteer on the emergency preparedness program, the emergency preparedness manager should emphasize that everyone is a vital part of the program and that their suggestions and recommendations are needed to make the program more understandable and effective. Employees should be encouraged to provide suggestions on improving plans and training to the emergency preparedness manager or to any disaster committee member.

Individual departments must be held accountable for updating their plans, checklists, and telephone call-down procedures. The emergency preparedness manager should work with each department in periodically reviewing their procedures and updating them as necessary. Department heads should encourage staff members to periodically review their own departmental procedures and to provide comments and suggestions. It is important to develop a sense of investment and pride in the various departmental plans and procedures. This sense of pride will provide motivation for the maintenance of the plans and timeliness of training. Individuals and departments should be publicly recognized for their efforts.

Chapter Three
Plans and Procedures

The disaster plan is the master document governing the response of the hospital and its personnel to a disaster. Procedures and instructions translate the "what" and "why" guidance of the disaster plan into the "how." The disaster plan and supporting procedures should be concise and tell the reader exactly what is necessary.

The comprehensive disaster plan is made up of three parts: the basic plan, annexes, and appendixes. The following discussion of the content and composition of each part reflects an ideal planning opportunity. Although the format of the examples in appendix A may be inconsistent with those of other hospitals, it is suggested that the rationale for each example be considered and that these ideas be incorporated into disaster plans wherever possible.

Basic Plan

The basic plan is the umbrella document that reflects hospital policy for responding to a disaster. All annexes and appendixes support and amplify the basic plan, and all training and exercises are based on it. (See appendix A for a sample basic plan, annex, and appendix.) The basic plan should assign responsibilities and authorities necessary to respond to all types of disasters, both internal and external. If possible, there should not be a separate plan for fires or other emergencies, but they may be incorporated as a specific annex. The basic plan identifies the initial who, what, when, where, and why.

Some basic guidelines for the development of basic plans follow:

- The plan should be easy to understand and be widely disseminated.
- The plan should consider any contingencies that may require changes in the health delivery system.
- The plan should be objective.
- The plan should be functional, flexible, and easy to implement.
- The plan should be permanent and updated periodically.
- The plan should be coordinated with similar plans of other organizations.
- Where appropriate, the plan should form part of a regional disaster plan.
- The plan should be comprehensive, that is, applicable to disasters within the institution and to external disasters.

The basic plan, which is typically about 20 pages long, should include the following sections:

Promulgation Statement

A brief discussion of why this plan exists and that the authorities, responsibilities, and procedures set forth in this plan will be followed by all hospital departments, employees, and volunteers in responding to an emergency involving the hospital. The signature of the chief executive officer or administrator is affixed to this page, and it is dated.

Foreword

A short description of how the plan was compiled, who is able to answer questions, and an acknowledgment of the persons who helped create or update the plan.

Table of Contents

A list of the parts of the plan by title, giving the appropriate page number. The table of contents should also include the annexes and appendixes.

Glossary of Terms

A short list of key terms and phrases, including a list of all codes and their meanings.

Instructions on Use of Plan

A brief description of how the plan is to be used in training, exercises, and real emergencies. Although it is tempting to discuss philosophy in this section, it should be kept as practical as possible. There is usually a one-page list of those who have copies of the plan and their copy numbers. There may also be a short paragraph stating how often the plan holders will be asked to verify the accuracy of the distribution. The individual who is responsible for the distribution and maintenance of the the plan should also be identified. If all departments do not receive a complete plan (basic, annexes, and appendixes), state how a copy of a specific annex or appendix can be obtained.

Authority and References

Identification of the documents that provide the authority to create and maintain the plan, training programs, exercises, and relationships with community agencies. These establish the requirements that must be satisfied and impose limits on operations. Also identify the authorities that allow the administrator, head nurse, or person on duty to both activate and deactivate the plan. References might include the following:

- Hospital management directives
- JCAH *Accreditation Manual for Hospitals*
- Local ordinances
- State law
- Union contracts
- Mutual aid agreements
- Corporate regulations and policies

Purpose

This section states the purposes of the disaster plan. The most important purpose of the disaster plan is to attend to the largest possible number of people requiring medical care promptly and effectively, in order to reduce the number of deaths and disabilities, and to aid recovery.

The following objectives may also be addressed:

- Prepare the staff and hospital resources for optimal performance in an emergency
- Reduce loss of property
- Make the community aware of the importance of the disaster plan, how it is executed, and the benefits it provides
- Establish security arrangements
- Continue normal services to the extent possible during an emergency
- Restore normal services as quickly as possible following an emergency

A "mission" statement may be included that says the primary mission of the hospital is to provide proper medical care for its patients and to victims of a disaster, and that all other functions are carried out to support this mission.

Situation and Assumptions

This section includes a list of hazards that may occur in categories from very likely to least likely. These may be such occurrences as snow storms, tornadoes, earthquakes, chemical spills, strikes, terrorism, bomb threats, fires, protesters, nuclear power plant accident, and others.

Identify how the hospital will operate under these various emergency conditions. The assumptions under which the plan is predicated may include the following:

- The worst condition for staffing will be the night shift.
- The command center and other facilities will be made operational within 30 minutes.
- Additional staff can be brought to the hospital within two hours.
- Mutual aid agreements will be honored.

Indicate the hospital's peak operating capacity. Determine this by careful analysis of available personnel by shift, instruments, equipment, outside sources of support, time constraints, and other resources.

Describe the various codes under which all or portions of the plan will be made operational. "Code Red" may be a fire, "Code 34" may mean a hospitalwide emergency and total implementation of the disaster plan. The codes should also be shown on a chart.

Concept of Operations

This section describes the philosophy and techniques of disaster operations. At least four concepts of operation that should be addressed:

- **Mitigation**—actions and strategies that will be employed to eliminate or reduce potential emergencies; for example, placing no smoking signs outside rooms in which oxygen is being used.
- **Preparedness**—activities that will be established to prepare the staff and the facility to meet an emergency, and to instill in the staff the philosophy that disaster preparedness is everyone's responsibility.
- **Response**—How will the hospital respond to an emergency? Refer to the lines of authority and the various codes. Who makes the decision that the emergency is over, and what criteria are used in making that decision?
- **Recovery**—When does the recovery phase begin? Who is in charge? How does it relate to normal operations? Who conducts the review of preparedness and response activities and their effectiveness? How will corrections be implemented?

Organization and Responsibilities

This section describes the emergency organization and the responsibilities of each organization and department. A diagram is very effective in showing the lines of authority and responsibility. Try to keep the emergency organization as close to the normal organization as possible.

Continuity of Authority

Who is in charge at the beginning of the emergency? Who takes over if that individual is not available? Who is in charge if the operation goes beyond the normal eight-hour shift? Charts should also be used here, along with references to specific documents. The line of succession should be indicated for all departments. Extent and limits of authority should be spelled out.

Support and Mutual Aid

This section lists the organizations, departments, and public service agencies that have agreed to provide support to the hospital. Briefly describe the type of support they will supply and the conditions under which it is available. Also identify those support activities that the hospital provides to other organizations or institutions. List the conditions for receiving and honoring requests for support. Identify any time constraints.

Plan Development and Maintenance

This section describes briefly how the disaster plan, annexes, and appendixes are to be developed and maintained. Who is responsible for this activity, for the entire hospital and for individual departments? Identify how changes can be made to any portion of the plan, and establish the schedule for periodic review and updating of the entire plan.

Functions

The functional descriptions should be supported by a functions and responsibility matrix, a sample of which is included in Appendix B. The functions that must be addressed are listed below. These functions are described below as annexes. In any plan, they may not be separate annexes, but the functions must be addressed.

The direction and control annex addresses who (departments and position titles) is in control during an emergency, and includes lines of succession and the location and operation of the command center. It identifies who declares an emergency and who terminates the emergency and indicates the authority limits and how control is transferred. This annex should be supplemented by charts showing the chain of command and graphics showing the locations of key operational areas and the floor plan for the command center. This annex may cover many of the functions normally considered a part of administration, including admissions, finance, and records. Emergency activities for these areas must be detailed to encompass any changes in procedures, storage of information, and call-up of personnel.

The communications and warning annex identifies the methods for receiving and disseminating warnings, alerts, and notifications from both outside and inside the hospital. List the actions to be taken by the department responsible for notifying staff or support agencies. This annex identifies the types of communication equipment available and categorizes them by priority of use. If not supported by specific appendixes, it includes a list of individuals to be called, with office and home telephone numbers and, where appropriate, pager numbers and radio frequencies. This list contains personal or confidential information and should be controlled as a confidential document. The list should also include outside agencies, including phone number, radio frequencies, and name or title of the person who would provide support such as security or evacuation for various types of emergencies.

The damage assessment annex identifies the department responsible for obtaining the necessary data, the forms to be used to collect the information, the type of information that should be provided by the various departments, and the time limits for obtaining the information. A brief discussion on the information required for applying to the Federal Emergency Management Agency (FEMA) for disaster relief funds for damage resulting from a natural disaster should be included.

The evacuation annex determines who is responsible for making the decision to evacuate part or all of the building and the criteria by which such a decision is to be made. The roles of the various departments in implementing an evacuation should be detailed in this annex. The locations for the transfer of patients and staff should be established, and, if necessary, a map showing the routes to the new

location should be included. Outside agencies that will lend support in the evacuation should be identified, and the annual program for briefing these agencies should be outlined.

The resource management annex identifies the department that is primarily responsible for resource management and how other departments are to support this function. If not included in a separate appendix, list resources within the hospital by type, quantity, and location. Do not limit resources to equipment and supplies, but also include personnel. Include a list of private firms and public organizations that could provide resource support by name, type of resource, person, and telephone number. Include a sample form for maintaining a record of the resources that are used, amount remaining, source of resupply, and estimated time to resupply.

The plant engineering annex identifies functions of the maintenance (plant engineering) department. It should cover such subjects as heating, ventilation, and air conditioning; water; electrical; housekeeping; communication equipment; medical gases; medical vacuum; waste handling; and emergency systems for electricity, water, and communications. Graphics showing the locations of key systems and control devices should be included. The relationship of all departments to the responsible department should be outlined.

The fire service annex identifies the department responsible for overall fire safety and response coordination and the chain of command. The responsibility of all departments in reporting and fighting fires should be listed. The meaning of specific alarms should be included. Graphics showing the location of fire alarms, standpipes, and fire-fighting equipment are necessary. If not supported by an appropriate appendix, manuals on the use of the fire extinguishers should be added. The relationship to the community fire department should be explained, along with the conditions under which they should be notified of a fire. The program for periodically briefing the community fire department and giving them a tour of the hospital should be outlined.

The security and law enforcement annex details the authorities and responsibilities of the security department, along with the responsibilities of other departments for situations such as theft, physical abuse, missing patients, unruly visitors, threatening phone calls, and bomb threats. The location of security stations should be identified, and the relationship with the community law enforcement agencies should be detailed. If other departments are expected to provide assistance under special circumstances, this should be detailed here. If not covered in the communications annex or a supporting appendix, include the form to be used in recording bomb threat information and the telephone numbers for the local law enforcement agency, the FBI, and, if appropriate, the nearby military installation. The program for periodically briefing community law enforcement agencies and giving them a tour of the hospital should be outlined.

The health and medical annex describes the disaster response operation and conduct of the emergency department, including triage and medical records. Address the health and medical needs of the staff and how they will be handled in a disaster. Identify special areas that will be set up, forms that must be filled out, rules for eligibility for workers' compensation, and staffing requirements. If special areas are to be used for functions such as triage or first aid, they should be shown graphically on a floor plan of the hospital. Any necessary forms should be included. Persons responsible for this service should be identified by title.

The triage annex designates the department responsible for triage both within the hospital and as support to community triage activities, along with other departments that provide support. Those support activities should be described clearly. This description should be supported by examples of the tags and forms that will be used in the triage operation, along with procedures for tagging and processing

forms for admission, transfer, or discharge of victims from the triage and emergency treatment area. The relationship to the community triage operation, including request for hospital support, should be detailed.

The search and rescue annex designates the department primarily responsible for search and rescue, along with criteria for obtaining support from other departments. Identify the various activities, ranging from looking for missing patients or staff members as a result of an internal disaster, to the search for a possible bomb. Identify the pattern of search and the role of community organizations in helping or conducting search and rescue. Provide a program for periodically briefing community support agencies and giving them a tour of the hospital. If the hospital is included in community plans for search and rescue, detail those commitments and the people involved.

The public information and education annex identifies representatives, and their alternates for both administrative details and medical details. If not supported by an appendix, include sample press releases for a variety of emergency situations. Describe the program for periodically briefing the press and giving them a tour of the hospital. Use graphics to show the location of briefing areas and list the types of equipment that will be provided, who is responsible for installation, and where the equipment is stored.

The shelter annex identifies the department that will be responsible for staffing and maintaining areas that can be used for shelter by the staff, patients, their families, and visitors. These areas should be identified on a floor diagram, along with their capacity and conditions for establishing such shelters. The requirements for the use of such shelters should be clearly stated. A copy of the information bulletin given to all employees, that explains the shelter program should be included.

The social services annex names the agencies or departments that will provide social and emotional support to staff, patients, and family members during and after an emergency. Consideration should be given to both the short-term and long-term needs of the staff and community. The physical location of the areas for administering support should be identified. Those community organizations that will provide assistance should be identified and a program for periodic briefings and tours of the hospital should be included. If not included in an appendix, a list of names, organizations, and telephone numbers should be included.

The hazard-specific annex identifies specific hazards within the community and identifies the department that is primarily responsible for the emergency response. Such hazards might include treatment of a community radiological accident or chemical spill. Community organizations or special response institutions should be described, along with a chart showing their name, type of hazard they can assist with, the person to call, and the telephone number. A program for briefing these agencies and giving them a tour of the hospital should also be included.

The reentry and recovery annex identifies the part of the organization that will be responsible for administering the reentry and recovery program, restoration of functions and departments by priority, criteria for reestablishing the operation of every department, and coordination with community organizations and hospital vendors. It should include a list of names, titles, telephone numbers, and services to be provided by community agencies and vendors.

Annexes

Annexes expand on the who, what, when, and where and begin to deal with the how of the emergency preparedness plan. Annexes support the basic plan, refer to specific sections of the basic plan, and provide details about how specific activities are to be accomplished.

The annexes should also briefly list the appendixes (standard operating procedures) that support the annex. The reader of the annex should not experience confusion about either the material in the annex or where supporting materials are located.

Annexes may be organized by department, by disaster type, or by function. The paragraphs that follow describe each method of organization and give the advantages and disadvantages of each.

Departmental

This is the most common type of organization of annexes in hospital disaster plans. Each annex describes what one department will do in the event of a disaster and makes references to actions outlined for other departments in either the basic plan or the specific departmental annex. These annexes are usually brief and in many cases may be like a procedure or checklist. The advantages of this type of annex are listed below:

- It is already in place.
- Staff members easily relate to their own department.
- It is easy to identify relationships within the disaster plan.
- The annex is easy to maintain because it describes the actions of a single organizational entity.

Some of the disadvantages of this type of annex organization follow:

- Interdepartmental knowledge and cooperation is reduced.
- There may be duplicate (and possibly inconsistent) information in the various annexes.
- Departmental annexes may not be easily understood by outside agencies that provide support.

Disaster-Oriented

Organization of annexes by disaster type is less common, but is usually found in the one document every hospital has—the fire plan. The fire plan is the classic example of an annex that supports the basic disaster plan but is organized by disaster type rather than by department or function. This type of annex has the following advantages:

- It is disaster or emergency-specific.
- It includes cross-department coordination.
- It is easily identified.

However, this type of annex does have some major limitations:

- It may require more annexes to cover all possible emergencies.
- There may be duplication between and among the various annexes.
- It requires increased training.
- It requires increased maintenance.
- The material in the basic plan may have to be increased to eliminate some of the duplication.

Functional

Organization of annexes by function is relatively new to hospitals. Functional annexes describe the functions to be performed, the departments supporting that function, and the emergencies for which they are appropriate. Its major advantages are listed below:

- Increased interdepartmental understanding and cooperation
- Reduced paperwork
- Same basic functions for each type of emergency
- Simplified training

- Emergency role more clearly understood by personnel
- Easy for support organizations to understand
- Consistent with the plans and annexes prepared by most other community emergency response organizations with which the hospital may cooperate

The major drawbacks of this type of annex are the following.

- It is new and requires a change of thinking on the part of the staff.
- Training on the annex will in many cases require the presence of staff from two or more departments.
- Annexes require interdepartmental coordination.

Regardless of the annex approach used, the first annex (which is only provided to those individuals responsible for the overall emergency preparedness program) should contain the following items:

- Departmental call-down lists
- Resource lists
- Bomb threat checklist
- Floor plans
- Command center layout and checklist
- Press briefing area layout and checklist
- External resources contact lists
- Mutual aid agreements
- Forms
  - —Triage kit
  - —Disaster evaluations
  - —Message forms
- Table of codes
- Evacuation procedures and routes
- Fire extinguisher, alarm, and standpipe locations
- Organization tables—normal and emergency
- Evaluation forms
- Telephone lists

Appendixes

The appendixes contain the technical descriptions of how specific tasks are to be accomplished. Appendixes support the annexes and are most often prepared about use of equipment or about departmental responsibilities. Thus, several appendixes may support a single annex. In format, the appendixes typically are either standard operating procedures or checklists. The key elements of the appendixes are as follows:

- They contain step-by-step instructions.
- They are succinct and to the point.
- They can cover more than one type of disaster.
- They can be directly applied without reference back to the disaster plan or annexes.
- They contain a list of the annexes and sections of the disaster plan they support.
- They are the documents most likely to be known and understood by the majority of the staff.
- They will be changed more often than the plan or annexes.

The appendixes typically cover the following topics:

- Notification of staff
- Reporting requirements
- Use of specialized pieces of equipment

- Setup and operation of special facilities
- Fire fighting and reporting
- Staffing requirements
- Credentials of employees, visitors, press, and others
- Emergency discharge of patients
- Transfer of patient records
- Closing of units

The contents of the appendixes may contain confidential information, such as home telephone numbers. They should therefore be protected, and only individuals who need this information should have access to it.

Plan Update

Planning is an evolutionary and continuous process. The day the comprehensive disaster plan is completed is the day the next round of updating begins. This section addresses methods of obtaining and processing formal and informal contributions for updating the disaster plan.

The plan update covers more than just what is written on the pages of the plan. It covers every element of the hospital: staff, facilities, materials, operational resources, drugs, instruments, and reserves. It is a method of identifying and highlighting any errors or deficiencies that should be corrected.

Systematic plan updates afford the opportunity to be certain that the plan exists within the various departments, is being applied, is kept up to date, that the roster of personnel and list of material resources are complete, and that the activities covered by the plan are being carried out. The update also provides an opportunity to check the condition of equipment and the turnover of reserve drugs.

Regardless of how well a hospital disaster plan is prepared, the plan cannot succeed if evaluations to ensure that it can be successfully applied are not done. An evaluation therefore requires planning; the clearer, more complete, precise, and coordinated a plan is, the more complete the evaluation should be.

The JCAH requires that the disaster plan be reviewed and updated annually. This is a formal, extensive review that requires approximately three months to complete. In addition, quarterly updates are required to ensure that the emergency notification list of key personnel is current. This update should check home telephone numbers, hospital extensions, pager codes, and telephone numbers of outside agencies. It is also useful to review inventories and checklists for supplies and equipment quarterly. Finally, the disaster plan may require interim revision to reflect the following possible changes:

- Changes in organizational structure
- Changes in hospital policy
- Changes in regulatory agencies, regulations, or policies
- Seasonal requirements
  - —Update of severe weather plans
  - —Hurricane
  - —Tornado
  - —Snow emergency
- Changes in physical facility or external environment
- Actual disaster experience

The annual formal review of the disaster plan is the primary activity for revision and updating the contents to reflect experiences during the past year, organizational changes, results of exercises, and actual disaster responses.

Traditional Review

The traditional review is a coordinated effort, managed by either the disaster committee chairman or the emergency preparedness manager, and is carried out in large

part by the disaster committee. Initially, department heads are asked to review the plan as it relates to their department and to recommend changes based on the review. In addition, recommended changes that have been noted but not acted on since the last update are reviewed for inclusion in the revision. The emergency preparedness manager, working with a subcommittee of the disaster committee, develops a draft revision of the plan. The revisions are reviewed and approved by the disaster committee and then by hospital administration. After all approvals have been received, the revised plan is issued.

Alternate Approach

Another approach to the annual review is to use a table-top exercise to review the disaster plan, conduct some indirect training, and experience a "controlled" exercise. (The format for the conduct of a table-top exercise is described in chapter 6.) The table-top exercise allows the emergency preparedness manager to conduct a simultaneous review of the plan by representatives from all departments. The table-top exercise provides a cooperative work atmosphere mixed with a disaster scenario that enables each department to review its portion of the plan in relation to the disaster scenario and to what is being done by other departments. Revisions to the various portions of the plan are made, and any conflicts or points of confusion among departments are identified and resolved.

Between formal plan reviews, the emergency preparedness manager frequently receives comments and suggestions regarding the plan. Although some may require immediate action, most can be deferred until the annual review. Typical sources of these comments and recommendations include the following:

- Feedback from a drill or exercise
  - Drill observer evaluation forms
  - Comments from drill participants
  - Formal critique
- Actual emergency
  - Comments from emergency workers
  - Formal critique
- Initial or refresher routine training
  - Training session evaluation form from trainees
  - Informal comments during training sessions
  - Logged comments during training sessions
- Consultants
  - Third-party review of plan
  - (Re)draft of plan or supporting instructions
  - Training support
- Preparation for JCAH survey (often coincides with the annual review)
- Mutual aid meetings (and planning coordination)
  - Local and state agencies
  - Agency inspections
  - Regulatory changes
  - Planned meetings
- Suggestions (memo or oral) from hospital personnel
- Departments' normal work relationships
  - Risk management
  - Quality assurance
  - Training department
- Monthly meetings of disaster committee

Document Control and Production

It is important that the current plan be distributed and continuously available to all personnel involved in disaster response.

A current disaster plan is of little value unless it is in the hands of those who must respond in the event of a disaster. It is therefore imperative that any changes be distributed in controlled fashion to the plan participants, and that complete up-to-date plans be available for their use. Advance planning is the key to control.

Document Format

The title page should contain the following information, and should be updated with each revision:

- Title
- Revision date
- Revision number
- Approval signature
- Issuing department

Each page should be headed by a title block that records the information listed below.

- Document identification
- Page number
- Revision date
- Revision number
- Signature or initials (optional)

The title block may be color coded so that unauthorized (photocopied) copies of the document can be readily identified. Each page should contain a unique page number. It is most convenient to have the page number indicate the section (or annex) and the number within the section.

Each revision package should contain detailed instructions for removing superseded pages and for inserting new pages (see appendix C). The table of contents should be updated along with the text. An appendix to the plan should contain a list showing the current revision date and number for each page of the plan. It is helpful to the user if the most recent revisions are flagged on the revised pages by a vertical bar or asterisk in the margin adjacent to the change, or by recording the change in bold type.

Document Production

Whenever possible, it is helpful to enter the text and changes to the disaster plan on a word processor (or computer). This simplifies updating and document production. The text and reproduction masters should be under the control of the emergency preparedness manager. The procedures or implementing instructions should be prepared whenever possible in a consistent format (established by the emergency preparedness manager). If resources permit, the emergency preparedness manager may offer to type and reproduce the implementing instructions for the responding departments. This would enhance consistency and coordination in the instructions.

The mechanics of reproduction will vary from hospital to hospital. Some will produce the plan and the changes in-house, others will send them to a printer. In either case, control of the copies must be maintained by the emergency preparedness manager. If color-coded title blocks are used, that paper must also be controlled.

Although two-sided printing is more economical, single-sided printing permits easier revision and updating. Pages printed on only one side are easier to use during a crisis. Tabs also facilitate reference during a crisis.

Of the many types of document binding available, a variation of a 3-ring binder (D-ring or 3-post) is recommended. They readily permit insertion of pages to update the document and they will lie open to a selected page during reference.

Recordkeeping and Document Safeguards

For risk management, quality assurance, insurance protection, JCAH surveys, and good management practice, the following records should be maintained by the emergency preparedness manager:

- Controlled copy acceptance forms
- Controlled copy change forms
- Disaster plan master copy
- One copy of all superseded plans and pages
- All approval documents
- Minutes of all disaster committee meetings
- All records of training
- Training outlines
- Copies of tests
- Critiques of drills and exercises
- Critiques of actual emergencies

The hospital's legal department can advise how long each category of records should be retained.

Safeguards

There should be a hard copy of all text files stored on a computer or word processor. All confidential and sensitive information must be controlled. This includes:

- Telephone lists
- Security procedures
- Design and operation of certain emergency equipment
- Medical records

Consider establishing a file of redundant records to protect against their loss in case of fire, vandalism, or sabotage. However, do not keep the redundant records in the same physical location as the originals Place them in another department or even in another building.

Legal Review

In this day of suit and countersuit, it is prudent on the part of the emergency preparedness manager and the risk manager to have the hospital legal department or legal council make a complete review of the disaster plan. They should review the plan from the perspective of potential lawsuits based on the following:

- Commitments made in the plan to support other organizations
- Support anticipated from other organizations
- Compliance with specific rules and regulations
- Lines of authority
- Legal considerations that are not addressed in the plan

The legal review should be done annually as a part of the formal review process.

Chapter Four

Hospital Emergency Preparedness: Part of the Community Program

The hospital and its response to a disaster are only part of a larger disaster preparedness program. This program begins at the local level and includes state and even national programs. The hospital is a part of the community's ability to respond to a disaster by providing medical services that are not available from any other local source. Where the community has more than one hospital, all of the hospitals must work together with the local emergency preparedness organization to identify their individual and collective resources and abilities.

Hospitals should be a part of the community's efforts in the major program areas of hazard mitigation, preparedness, response to an emergency, and recovery from an emergency. In the past, the traditional approach for obtaining a hospital's participation in the community emergency preparedness program has been for the local emergency preparedness coordinator to elicit the hospital's support in whatever the community was developing or testing. However, this approach can no longer be counted on to be effective in gaining full benefits from the community program. The hospital must make the first move and volunteer to become an active part in the community's planning. Some of the benefits of this approach are as follows:

- The resources and capabilities of the hospital will be accurately reflected in the community disaster plans.
- The resources of the various hospitals will be identified and cataloged.
- The hospital will have the opportunity to participate in communitywide exercises, expanding its own exercise experience.
- The hospital will be able to identify and make arrangements with other organizations for support.
- The community preparedness program will be enhanced by the hospital's cooperation and participation.

The following paragraphs consider the hospital's interaction with the community during emergencies that occur within the hospital itself, and for those occurring outside of the hospital.

Internal Disaster—Community Helps Hospital

In case of a disaster within the hospital, the community has traditionally given support in the areas of fire fighting, law enforcement, and ambulance service.

The term "internal disaster" is really a misnomer because any "disaster" will be a bigger problem than the hospital can handle on its own. If the disaster is a fire, the hospital will need support from the local fire department. If the disaster is a bomb threat, the hospital will need support from law enforcement agencies, from local fire departments, and, if all or part of the hospital is to be evacuated, from transportation departments, rescue squads, and ambulance companies.

Interruption of water, electrical, or natural gas services will require support not only from the utilities that provide those services, but also from private contractors with generators, the local emergency preparedness agency for generators and water tanks, the fire department to ensure safe shut-off and turn-on of supply lines and equipment, and transportation services if patients must be moved.

The hospital may not normally consider the news media as a source of support in an emergency situation; but news of an internal disaster will always find its way to the local newspaper, radio, or television station. At that point, the hospital wants the story to be reported accurately and fairly. The relationship the hospital has established with the news media before the disaster occurs will greatly influence the accuracy and tone of the story that is printed or broadcast. The media may be able to help by alerting or recalling staff via radio and television in situations where telephone service has been disrupted.

External – Hospital Helps Community

External disasters require coordination for a unified response by the hospital and the other emergency response organizations. In addition to the local disaster response organization, the victims and their families, noncommunity response organizations, the press, and others also become actively involved. Close coordination and cooperation among disaster response organizations before a disaster occurs enables the hospital and the community to respond to the disaster in the most effective manner and allows the talents and resources of the hospital to be used most effectively.

The primary support that the hospital provides to the community during and immediately after a disaster is medical treatment of the victims. However, the community may call on the hospital to support other aspects of its response to the emergency.

One of the more traditional ways in which the hospital helps the community is by assigning hospital personnel (primarily doctors and nurses) to the triage location. In some cases, the hospital personnel will be in charge of the triage operation, in other cases, they will provide support to the emergency medical services organization. The type of support, lines of authority, areas of responsibility, number of personnel who can be committed to the operation, communications, and transportation should all be addressed, documented, trained, and exercised before an emergency occurs.

If emergency shelters are established within the community for homeless persons, hospital personnel may be requested to provide public health support at these shelters. The role of a hospital in such a situation could be to provide first aid, identify those who are injured or ill, isolate those who may have a contagious illness, establish good health procedures and facilities, and provide information about relatives who have been admitted to the hospital.

When a disaster results in deaths, the hospital can help identify the dead and provide temporary storage of the bodies. The hospital's social services staff may be asked to provide assistance to the relatives in coping with their grief.

The use of hospital facilities for purposes other than normal hospital operations may be required. This might include feeding homeless people, sheltering disaster victims, conducting mass inoculations, or allowing press briefings to be held in the hospital auditorium or press briefing area.

Also, the hospital might be asked to provide social or psychological support to not only the relatives and friends of victims, but to the community as a whole. Support for the community might include psychological counseling for as long as one year after the disaster. In conjunction with state or local public health authorities, the hospital may be asked to provide instructors, materials, or training space for classes ranging from basic sanitation to reestablishing family medical records. If the offices of physicians have been destroyed, the hospital may have to become a temporary location for those physicians. Planning for this type of support can only be done in a sketchy fashion by identifying the potential resources and the willingness to work with the community organizations to develop and implement the special programs.

Day-to-Day and Emergency Relationships

As was mentioned earlier, the traditional approach in developing the relationship between the hospital and the community emergency preparedness agency was for the community agency to approach the hospital. This will probably continue to be the most common approach, but the responsibility for day-to-day communication

and sharing of ideas and resources is a joint responsibility. The hospital emergency preparedness manager should seek out the community counterpart and establish the lines of communication.

The capabilities, resources, and requirements of the hospital should be known to those organizations that would cooperate with the hospital during either an internal or external emergency. The hospital should take an active role in inviting representatives from the various agencies, organizations, and departments to tour the hospital on a regular basis and become familiar with the physical operation of the institution.

The emergency preparedness manager should request a copy of the disaster plans from the community and other organizations, so the type of support those agencies can give and the type of support that those agencies may request of the hospital can be determined. Those community agencies should be given copies of the hospital's disaster plan, and community agencies and the hospital should review each other's plans periodically.

The hospital's emergency preparedness manager should work with the local emergency preparedness director in developing, conducting, and evaluating a communitywide disaster exercise that includes hospital participation. This type of exercise should be conducted annually.

Emergency preparedness managers of the various hospitals in the community should meet several times a year to exchange information, ideas, requirements, and resources. Although hospitals are competitive on a day-to-day basis, they need to be cooperative in emergency preparedness. This cooperation cannot take place during an emergency unless the ground work has been done during normal conditions.

In most instances, it is prudent for the hospital to establish formal, written, mutual aid agreements with those organizations and vendors that will either be expected to provide support or to which support will be provided in a disaster. The formal agreements should clearly state conditions under which assistance can be requested, what type of support can be provided, estimated time for delivery of support, estimated length of time support can be sustained, the mechanisms for implementing the agreement, the length of time the agreement is binding, and include the signatures of the officials with the authority to commit the hospital and the other party to the agreement.

In an emergency, all the personal relationships and formal agreements that have been made will be called into action. Without previously designed working agreements and relationships, trying to respond to an emergency and effectively using or responding to other agencies and organizations will be very difficult, time consuming, and inefficient. Trying to create working relationships during a disaster can be a disaster in itself. To facilitate disaster response operations, the foundation must be laid before the disaster.

Support Organizations

The list of organizations, agencies, and departments that the hospital should have working relationships with can be extensive, but it does not have to be overwhelming. At a minimum it should include the following:

- Police department
- Fire department
- Civil preparedness agency
- Press (newspaper, radio, and television)
- Industry
- Utility companies
- Ambulance companies
- Other medical facilities
- Transportation department

- Local public health agency
- Local or regional emergency medical services agency
- If available, regional National Disaster Medical System coordinator

Volunteers

Volunteers are a major resource for personnel and supplemental skills within the hospital. They are a personnel resource that can provide support during an emergency, and should be included in all disaster planning and training. The emergency preparedness manager should work with the director of volunteers to identify the number of people and types of skills that can be made available in an emergency.

The annexes and appendixes to the disaster preparedness plan should indicate the specific need, functions to be performed, and identify the volunteers who are expected to respond to the disaster.

Within the community there are also other volunteer organizations that can provide valuable services to the hospital during an emergency. These may include service organizations, church groups, and Red Cross volunteers. They can help relieve the personnel and program burdens of the hospital as it tries to help victims of a disaster

National Disaster Medical System

The National Disaster Medical System (NDMS) is a federally coordinated initiative that augments the nation's emergency medical response capability. The purpose of NDMS is to establish a single national medical response capability for:

- Assisting state and local authorities in dealing with the medical and public health effects of major disasters
- Providing support to the military medical system in caring for casualties resulting from overseas armed conflicts

The NDMS has three major objectives:

- To provide emergency medical care to a disaster area in the form of medical assistance teams and medical supplies
- To evacuate patients who cannot be treated in the affected area to designated other locations
- To provide definitive care to patients through a network of hospitals participating in NDMS

The system is a voluntary cooperative effort of the federal, state, and local governments and the private sector. When fully developed, it will include 100,000 beds in hospitals throughout the country, numerous disaster medical assistance teams to clear and stage casualties, an evacuation system, and a logistic support system.

Hospitals in this system usually have more than 200 beds and are located in large metropolitan areas. When hospitals enter into a voluntary agreement with NDMS, they generally agree to commit a number of their acute care beds, subject to availability, for NDMS patients. Because this is a completely voluntary program, hospitals may offer more or fewer than the number committed in the agreement.

These hospitals also participate in local area NDMS drills, which are organized by the federally designated NDMS coordinating center. The coordinating center is usually a federal hospital, a local government, Emergency Medical System or disaster agency, or a major medical center. The coordinating center, in conjunction with local medical facilities, local government, and other organizations, establishes policies, plans, and procedures for sorting and transporting incoming patients.