

Standard Guide for Hospital Preparedness and Response¹

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1. Scope

1.1 This guide covers concepts, principles, and practices of an all-hazards comprehensive emergency management program for the planning, mitigation, response, recovery, and coordination of hospitals in response to a major incident.

1.2 This guide addresses the essential elements of the scope, planning, structure, application, and coordination of federal, state, local, voluntary, and nongovernmental resources necessary to the emergency operations plan for a hospital.

1.3 This guide establishes a common terminology for hospital emergency management and business continuity programs necessary to fulfill the basic service requirements of a hospital.

1.4 This guide provides hospital leaders with concepts of an emergency management plan, but an individual plan must be developed in synchrony with the community emergency operations plan and the National Incident Management System.

1.5 This guide does not address all of the necessary planning and response of hospitals to an incident that involves the near-total destruction of community services and systems.

1.6 For the purposes of this guide, the definition of hospital will be the current definition provided by the American Hospital Association for an acute care facility.

1.7 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use.

2. Referenced Documents

2.1 NFPA Standards:²

NFPA 1600 Standard for Disaster/Emergency Management and Business Continuity Programs

NFPA 1994 Standard on Protective Ensembles for Chemical/ Biological Terrorism Incidents

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *all-hazards, adj*—hazard is an inherent property of an event, product, or object that represents a threat to human life, property, or the environment. In this context, all-hazards refers to any incident or event that could pose such a threat.

3.1.1.1 *Discussion*—These may include special equipment and processes that are used less frequently on a daily basis and require routine training to be most effective during a major incident.

3.1.2 *basic societal functions, n*—those basic functions within a community that provide services for public health, health care, water/sanitation, shelter/clothing, food, energy supply, public works, environment, logistics/transportation, security, communications, economy, and education.

3.1.3 *business impact analysis (BIA), n*—management level analysis that identifies the impacts of losing the entity's resources by measuring the effect of the resource loss and escalating losses over time to provide the entity with reliable data upon which to base decisions concerning hazard mitigation, recovery strategies, and continuity planning.

3.1.4 *capacity, adj*—capability at a given time for a hospital to provide a given service that is distinct from capability, which defines an ability to provide a service under normal operating conditions.

3.1.4.1 *Discussion*—A facility may have the capability to treat acute major incident patients in a cath lab, but if a critical resource is missing at the time of a disaster (for example, personnel, equipment, space, or electricity), the facility would not have the capacity to care for such a patient at that time when there is a need.

3.1.5 *communications systems*, *n*—those processes and resources (physical, procedural, and personnel related) that provide information exchange during an identified major incident.

3.1.6 *community/region*, *n*—that area in which a hospital provides health services and basic societal functions.

3.1.7 *continuity of essential services, n*—services that hospitals provide as a vital daily function that must be maintained

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² Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269-9101.

as long as possible and then restored at the earliest opportunity after managing the necessary elements of the emergency incident. This is a business continuity planning focus.

3.1.8 *damage assessment, n*—appraisal or determination of the effects of the disaster on human, structural, economic, and natural resources.

3.1.9 *disaster*, n—sudden calamity, with or without casualties, so defined by local, county, state, or federal guidelines; before a disaster declaration, a disaster is an event that exceeds (or might exceed) the resources for patient care at that time, for a community, a hospital, or both.

3.1.9.1 *Discussion*—The definition of casualty is expansive and could include acute injuries, illnesses, or deaths, exacerbation of chronic medical conditions as a result of poor access to primary care following the disaster (disaster-related acute major incident), and post-traumatic stress disorders. A disaster could also include sustained infrastructure incapacity and the inability to access necessary external resources and supplies.

3.1.10 *fatality management*, *n*—processes designated by existing plans or local officials overseeing fatalities from an incident (medical examiner or coroner) to organize, coordinate, manage, and direct manage incident fatalities and identify temporary morgue facilities.

3.1.10.1 *Discussion*—Fatalities that occur during the time of the incident are managed in uniform fashion, whether the deaths appear connected to the incident or not.

3.1.11 hazard vulnerability analysis (HVA), n—process by which a hospital's personnel identify real or potential hazards that would affect hospital operations, particularly those with negative implications for health care, and identify internal capabilities and community preparedness to address those hazards and, in a region of health care providers, this may include a needs assessment as a preliminary survey of real or potential hazards to a specific group of hospitals.

3.1.11.1 *Discussion*—This will be accomplished with a systematic approach to the probability and consequence of hazards and events that threaten the continuity of a hospital's business operations. This would normally consist of determination of the likely and potential hazards to the operations of the hospital, an evaluation of the vulnerability of the hospital to those hazards, and determination of the resources necessary to reduce those hazards and vulnerability. The analysis provides the basis for establishing relevant major incident management plans and should be coordinated with local or state authorities, or both, and regional health care facilities as appropriate.

3.1.12 *hospital, n*—health care institution with an organized medical and professional staff and inpatient beds available around the clock, whose primary function is to provide inpatient medical, nursing, and other health-related service to patients for both surgical and nonsurgical conditions and that usually provides some outpatient services, particularly emergency care, for licensure purposes.

3.1.12.1 *Discussion*—Each state has its own definition of hospital, which affects licensing under laws of that state.

3.1.13 hospital emergency operations center (HEOC), n—(also known as a command center) designated area of the

hospital that serves as a meeting area, with strategic and tactical support for the incident command system/incident management system.

3.1.13.1 *Discussion*—Reference to the HEOC will avoid confusion with the community/county EOC. The EOC must have adequate technical capability and personnel to support the operation of the incident and the hospitals response.

3.1.14 *hospital evacuation*, *n*—evacuation of a hospital refers to those actions by medical staff to remove inpatients, outpatients, and staff physically from the location of a hazard, thus interrupting the pathway of exposure and includes evacuation within the facility (horizontal or vertical) and away from the facility.

3.1.14.1 *Discussion*—Evacuation is a short-term or long-term protection strategy. An alternative short-term protection technique may be sheltering, but in some circumstances (earthquake-damaged hospital), it would need to be to another safe structure.

3.1.15 *hospital major incident*, *n*—major incident is any event that approaches or exceeds the capability of a hospital or health care organization to maintain operations or requires significant disruption to the routine operations of the facility to address.

3.1.15.1 *Discussion*—The definition may be institutionspecific since hospitals on a daily basis operate with different resources and capabilities to respond to different crises.

3.1.16 hospital management (group supervisors/leaders/ managers), n—qualified personnel who control a specific department, unit, area, or task assignment.

3.1.17 *hospital mutual aid, n*—coordination of resources, including but not limited to: facilities, personnel, vehicles, equipment, supplies, pharmaceuticals, and services, pursuant to an agreement between hospitals and other health care organizations, providing for such interchange on a reciprocal basis in responding to a major incident or disaster.

3.1.18 *hospital surge capacity, n*—ability of a hospital to expand rapidly and augment services in response to one or multiple incidents.

3.1.18.1 *Discussion*—This response is under the control of the facility's emergency management plan and may include integration with regional authorities responsible for processes to manage and provide logistical and resource support to manage the patient influx.

3.1.19 *incident command system (ICS), n*—resource management system identified by a chain of command that adapts to an emergency event; the system adopted by the hospital should follow accepted ICS processes and be compatible with the National Incident Management System.

3.1.19.1 *Discussion*—ICS contains common terminology, individual ICS position responsibilities, integrated communications, modular composition of resources, unified command structure, manageable span of control, consolidated action plans and resource management, and plans for termination and restoration of business continuity. The system allows emergency responders from hospitals and other emergency response organizations to coordinate activities with familiar management concepts and request and implement mutual aid. 3.1.20 *incident commander, n*—individual responsible for the overall management and coordination of personnel and resources involved in a major incident.

3.1.20.1 *Discussion*—With a hospital event, the hospital incident commander is that official within an entity (for example, hospitals or group of hospitals) who serves as the EOC executive and coordinates the assets of the entity in the response to an event. The hospital incident commander should be the best qualified depending on the nature of the incident. This may be the senior physician on site, a department head, a nursing or house supervisor, or a hospital administrator. If the scope of the incident involves more then the hospital alone, the community official responsible for community response may be the incident commander of record.

3.1.21 *incident management system (IMS), n*—in emergency management applications, the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility to accomplish stated objectives pertinent to an incident effectively.

3.1.21.1 *Discussion*—The system identifies management responsibilities and establishes policies and procedures for coordinating emergency response, business continuity, and recovery activities across hospital departments, outside agencies, and jurisdictions and that maintains compliance with state or federal regulations. The incident command system is an integral component of the incident management system.

3.1.22 *major incident*, *n*—this is defined within the context of all-hazards preparedness as any event that approaches or exceeds the capacity of a hospital or health care organization to maintain operations or requires significant disruption to the routine operations of the facility.

3.1.22.1 *Discussion*—A major incident may be defined differently for an individual hospital, a system of hospitals operating as one entity, or a group of independent hospitals that have a regional responsibility for planning and response. It is essential that each hospital plan for incidents that could occur at any of these levels.

3.1.23 *major multiple casualty incident, n*—(also known as a mass casualty incident) incident producing large numbers of casualties approaching or beyond local health care capacities.

3.1.24 *medical disaster, n*—type of significant medical incident that exceeds the patient care capacity of local resources and routinely available regional or multi-jurisdictional medical mutual aid.

3.1.25 *mitigation*, n—structural and non-structural activities taken to eliminate or reduce the probability of the event or reduce its severity or consequences, either before or following a disaster or emergency.

3.1.26 *multiple casualty incident (MCI), n*—type of significant medical incident for which local medical resources are available and adequate to provide for field medical triage and stabilization and for which appropriate local facilities are available and adequate for diagnosis and treatment.

3.1.27 *mutual aid*, *n*—prearranged agreement developed between two or more entities to render assistance to the parties of the agreement.

3.1.27.1 *Discussion*—Mutual aid agreements between entities are an effective means to obtain resources in emergency situations and augment surge capacity.

3.1.28 *mutual aid agreement*, *n*—cooperative assistance agreements, intergovernmental compacts, or other documents commonly used for the sharing of resources.

3.1.29 personal protective equipment (PPE), n—ensembles and ensemble elements to protect health care workers from contact with dangerous agents, including chemicals, biologic agents, blood, and body fluids, when providing victim or patient care during emergency medical operations; levels of PPE are defined in NFPA 1994. Also refer to Centers for Disease Control HICPAC Isolation Guidelines.

3.1.29.1 *Discussion*—This equipment would meet minimum design, performance, testing, and certification requirements for use during emergency operations, as identified from the HVA.

3.1.30 *preparedness, adj*—encompasses those actions taken before an incident to improve the capability and capacity to respond to a major incident within the hospital, community, or region. Preparedness efforts include, but are not limited to: assessments of hazards, risks, response needs, and vulnerabilities; planning functions; interagency collaboration; education and training functions; exercise activities; attaining minimal capacities; and necessary engineering controls or structural changes to facilities and do not include mobilization of response resources under circumstances other than simulated events.

3.1.31 *public health surge capacity, n*—ability of a defined community and its health care system to rapidly expand beyond normal services to meet the increased demand for medical care and public health that would be required to care for the casualties and fatalities resulting from a large-scale public health emergency or disaster; included are the resources for mass care, mass prophylaxis or vaccination, laboratory services, public information, mental health support, epidemiologic investigation, and law enforcement support.

3.1.31.1 *Discussion*—Initially, the response is coordinated by local public health/regional authorities. In some incidents, control will pass to regional, state, or federal authorities when outside assets begin arriving. This response facilitates actions to augment triage, treatment, isolation, fatality management, and resource flow to maximize the outcome of involved persons.

3.1.32 *public information officer (PIO), n*—individual designated by the incident commander or the hospital incident commander for the preparation and dissemination of factual and timely reports to the community, usually through the news media.

3.1.32.1 *Discussion*—This individual will benefit from training and appropriate qualifications.

3.1.33 *response activities*, *n*—those actions necessary to minimize negative effects of an incident and lead to recovery and restoration of essential hospital services.

3.1.34 *safety management*, *n*—function that identifies real or potential hazards, unsafe environment or procedures, and appropriate workforce protective measures at the incident, and ensures the appropriate corrective or preventive actions under