Chapter 1

The Six Critical Functions of Emergency Management

Earthquakes, tornadoes, heat waves, floods, oil spills, fires, nuclear accidents, dirty bombs, pandemic flu, hurricanes, blackouts, blizzards. The list of disasters is endless—and continues to grow. On average, disasters cause 185 deaths per day. The loss of human life; the physical and environmental damages; the disruption to school, homes, business, and productivity; and the financial impact can be devastating to any country, city, and/or town.

Billions of people in more than a hundred countries will be exposed over the course of their lives to at least one earthquake, cyclone, flood, or drought. But the impact of these, and many disasters, can be sharply reduced if we make an effort to assess risk, to develop and test contingency plans, and to respond to a disaster before it happens, rather than after the damage has been done. The message is clear, regardless of the cause of the emergency situation. The six critical areas are communication, resources and supplies, security, staff responsibilities, utilities management, and patient care.

The Joint Commission’s emergency management standards are designed to help organizations achieve this readiness. Organizations that plan for managing six critical areas of emergency response are better able to assess their needs and prepare staff to respond to events most likely to occur, regardless of the causes of the emergency situation. The six critical areas are communication, resources and supplies, security, staff responsibilities, utilities management, and patient care.

The Joint Commission identified these six areas by categorizing the lessons learned from organizations interviewed following large-scale disasters, such as the 2004 hurricanes in Florida and Hurricanes Katrina and Rita in 2005. When organizations have a sound understanding of their response to these critical areas of emergency management, they have developed an “all-haz-

Revisions to Emergency Management Standards

• Standard EC.4.10 replaced by nine emergency management standards
• Became effective January 1, 2008
• Effective for hospitals, critical access hospitals, long term care organizations, Medicare-/Medicaid-based long term care programs

Revised Standards Versus Previous Standards

• All 21 elements of performance (EPs) from former Standard EC.4.10 still present in revised standards
• 30-plus additional EPs incorporated into emergency management standards

Rationale for Change

The revised standards are designed to accomplish the following:

• Emphasize a scalable approach to manage the variety, intensity, and duration of the disasters that can affect a single organization, multiple organizations, an entire community, or region
• Stress the importance of planning and testing response plans for emergencies during conditions when the local community cannot support the health care organization
Emergency Management in Health Care: An All-Hazards Approach

An “all-hazards” approach that supports a level of preparedness sufficient to address a range of emergencies, regardless of the cause. This chapter briefly describes the six critical areas of emergency management, which are discussed individually and in combination with other requirements in subsequent chapters of this book.

Communication
In the event that community infrastructure is damaged and/or an organization’s power or facilities experience debilitation, communication pathways, whether dependent on fiber-optic cables, electricity, satellite, or other conduits, are likely to fail. Organizations must develop a plan to maintain communication pathways both within the organization and to critical community resources. The Joint Commission’s expectations related to communication are explored in Chapter 4.

Resources and Assets
A solid understanding of the scope and availability of an organization’s resources and assets is as important, and perhaps more important, during an emergency than during times of normal operation. Materials and supplies and vendor and community services, as well as state and federal programs, are some of the essential resources that organizations must know how to access in times of crisis to ensure patient safety and sustain care, treatment, and services. Details regarding organizational planning for resources and assets during an emergency can be found in Chapter 5.

Safety and Security
The safety and security of patients is the prime responsibility of the organization during an emergency. As emergency situations develop and parameters of operability shift, organizations must provide safe and secure environments for their patients and staff. This concept is explored in Chapter 6 of this book.

Staff Responsibilities
One of the emergency management standards addresses staff responsibilities, which is one of the critical functions of emergency management. During an emergency, the probability that staff responsibilities will change is high. As new risks develop along with changing conditions, staff will need to adapt their roles to meet new demands on their abilities to care for patients. If staff cannot anticipate how they might be called to perform during an emergency, the likelihood increases that the organization will not sustain itself during an emergency. Chapter 7 addresses the issues surrounding defining and managing staff roles and responsibilities.

Utilities Management
An organization depends on the uninterrupted function of its utilities during an emergency. The supply of key utilities, such as power, potable water, ventilation, and fuel, must not be disrupted or adverse events could occur as a result. The details surrounding this requirement and the framework for managing this critical function are discussed in Chapter 8.

Patient Clinical and Support Activities
The clinical needs of patients during an emergency are of prime importance, according to one of the revised emergency management standards. The organization must have clear, reasonable plans to address the needs of patients during extreme conditions when the organization’s infrastructure and resources are taxed. Chapter 9 examines the accreditation requirements associated with patient clinical and support activities.

Best Practices for Success
The Joint Commission emergency management standards require organizations to take a holistic approach to managing an emergency—not only preparing for a coordinated response but anticipating problems and ensuring self-efficiency. Effective emergency management requires planning and preparation efforts and complete and total support from everyone in an organization—from leadership to front-line staff.

The Joint Commission’s emergency management standards address a variety of issues, including the need for an emergency operations plan, which outlines the incident command system and designates roles and responsibilities during an emergency. In addition, the standards require organizations to address the six critical functions outlined in this chapter that can profoundly affect the outcome of an emergency: communication, resources and assets, safety and security, staff responsibilities, utilities management, and clinical and support activities. The following sections explore how organizations can meet the standards and their content.

Working with the Community
Preparing for an emergency cannot happen in a vacuum. “All [emergency management] planning should be done in the context of the community. You should know where your organization fits in a community response, including what your organization can offer as well as what you can expect in the way of help and mutual aid,” says Jerry Gervais, C.H.E.M., C.H.S.P., associate director, Standards Interpretation Group, The Joint Commission. Effectively working with the community...
includes coordinating with local community emergency responders—such as the police department, fire department, and emergency medical technicians—the local public health department, and any regional or statewide emergency operations entities. “It is critical that your organization not only understand how the local, regional, and statewide emergency operations command systems function but also be an active member in those entities when appropriate. By having a seat at the table, you can ensure your organization’s voice is heard and your needs are met,” says Gervais.

In addition, it is important for organizations to use the same terminology as their local, regional, and state emergency operations commands with regard to emergency management so communication can be effective. This may involve using a recognized incident command system such as the Hospital Incident Command System (HICS) or the National Incident Management System (NIMS). (For more information on HICS and NIMS, see Chapter 3.)

**Working with Other Health Care Organizations**

To ensure a coordinated response to an emergency, health care organizations must also open up a dialogue with other health care organizations in the area. It is important to establish contact and build relationships before an emergency. “This may mean talking with direct competitors about how you can support each other during unplanned situations,” says Gervais. “During an emergency, the organizations you compete with every day become your partners. By establishing a relationship before an emergency, you can ensure that partnership is solid and complete.”

**Tightening Relationships with Suppliers**

Before an emergency, organizations should consider tightening up any relationships they have with suppliers and making sure those suppliers can deliver supplies during an emergency. This includes discussing with a supplier the ways the company will get supplies to the health care organization and how many other health care organizations the supplier has agreed to supply. “For example, if a supplier has only one route of delivery—let’s say by truck via an access road—and that road is unusable during an emergency, an organization should have a contingency plan worked out with the supplier so that supplies are brought via another route,” says Gervais. “Likewise, if a supplier has agreed to deliver supplies to four other hospitals in the area during an emergency, it is possible that supplier will be unable to fill all of its commitments. During an emergency is not the time to find out that your supplier has overcommitted. The organization should talk with both the supplier and other health care organizations in the area to determine the depth and breadth of the supply chain.” It is also a prudent move to contact suppliers out of the local area or even out of state/region as a backup plan. Local suppliers might experience the same issues (flooding, lack of staff, loss of power, and so on) as your organization.

**Addressing an Evacuation**

One aspect of emergency management with which organizations often struggle is evacuation. According to the Joint Commission standards, an organization must set specific criteria that outline the timeframe the organization is able to stay and effectively “weather” an emergency versus when it will close or evacuate. “If an organization chooses to stay, it must have plans to be self-sufficient for 96 hours. If this is not possible, then the organization should have plans in place to evacuate after a predetermined period,” says Gervais. For example, an organization might determine that it can be self-sufficient during an emergency for 48 hours, after which point it will initiate evacuation procedures. However, the organization should also make sure that its evacuation plan can be supported 48 hours after the start of an emergency. If the organization begins evacuating at 48 hours and the rest of the community has evacuated after 12 hours, the health care organization may run into significant problems. Once again, the need for community coordination is paramount.

“To effectively evacuate your facility, you have to understand how the evacuation will unfold, including who will be evacuated first and how the evacuation will safely proceed,” says Gervais. “You also must understand where you are going when you evacuate and what happens to patients when you get there.” To effectively prepare for evacuation, organizations should determine who has the authority to call an evacuation and ensure that all the staff knows who that person is. Staff members should also know their roles and responsibilities when an evacuation is called. “Basically, organizations should define an evacuation process to follow and ensure everyone in the organization is clear on that process,” says Gervais.

Organizations should also consider what to do when the emergency is over. They should define who has the authority to declare an emergency over and have a specific plan that addresses the financial, staff, and patient care aspects of recovery.
CASE EXAMPLE:
FLOODING THREATENS HOSPITAL’S UTILITY SYSTEMS,
TESTS EMERGENCY MANAGEMENT PLAN

Our Lady of Lourdes Memorial Hospital sits close to the banks of the Susquehanna River in Binghamton, New York. Part of the Catholic health ministry known as Ascension Health, the hospital’s main campus includes an ambulatory surgery center and a regional cancer center. In April 2005 the organization’s leaders responded to predictions of a storm that could bring a 100-year flood to the area by quickly building an 8-foot berm near the river’s edge. When that storm arrived, the berm held up. A little over a year later, it would be tested again, as would the hospital’s emergency management plan.

In accordance with emergency management planning standards, the 8-foot berm was built to separate the river from the hospital’s parking lot and prevent water from threatening the facility and its power plant. “With the berm in place and additional adjustments made to our emergency management plan, we felt well prepared to deal with the impact of that 2005 storm,” says John O’Neil, CEO. “When it passed without incident, we felt even more comfortable that we were in good shape.”

Still, O’Neil says, when you’re providing care to patients in a facility that stands near a river that is fed by up to 9,000 tributaries, you never feel too comfortable. On June 27, 2006, the storm that sent rising waters into communities elsewhere across the East Coast also brought flooding to areas of Binghamton. “The first day, we could see the water rising, and by the next morning, it was 5 to 6 feet up the berm,” O’Neil recalls. Also in accordance with emergency management standards, Our Lady of Lourdes immediately set up an incident command center and, with a watchful eye on the river, began to consider further measures.

Taking Proactive Precautions

In keeping with Joint Commission requirements, those measures included communicating with the county’s emergency management center as well as informing neighboring hospitals of a situation that could worsen and that might even involve transferring patients to those facilities. The situation did worsen later that morning. Although the berm continued to hold back the Susquehanna, water began to come up through the underground sewers and sanitary systems and into the hospital’s water system. “That means you don’t have clean water,” says O’Neil. “This is something we hadn’t considered, but as soon as we became aware of it, we began an evacuation of the ground floor.”

Attempting to lessen the severity of a potentially larger evacuation, which is also addressed in Joint Commission emergency management standards, staff at Our Lady of Lourdes transferred critical patients to one of the neighboring hospitals; they also transferred patients whose physical condition would hamper the speed and safety of a full-scale evacuation. The hospital also discharged 35 patients whose treatments had been completed.

“Any time you move critically ill patients, it poses some risk to their safety,” says Joseph Cappiello, former vice president, Accreditation Field Operations, Joint Commission. “But because they were thinking ahead and drew on their knowledge to recognize the dangerous possibility of being trapped in the facility with critical patients and others who are difficult to move, the hospital’s leaders stayed one step ahead of the situation,” he says. “They took a proactive rather than a reactive approach, and that’s what emergency management planning is all about.”

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Case Example: Flooding Threatens Hospital’s Utility Systems, Tests Emergency Management Plan, continued

Relying on a Team Effort Evacuation
The pumps that the hospital activated on the facility’s ground floor—which housed the pharmacy, laboratory, and sterile processing unit—were little help against the continuing flow of water that soon jeopardized the hospital’s electrical system. “In the afternoon, we shut down the power, terminated operations, and began evacuating our 90 remaining inpatients,” says O’Neil. This action also corresponds with Joint Commission emergency management standards related to temporarily closing or evacuating the facility.

During the throes of the evacuation effort, a pregnant patient gave birth. The infant was delivered safely and, with the mother and the other patients, was transferred in a process that involved two other hospitals, an ambulance system, and even a city bus. “In working as quickly as possible, we not only secured ambulances, but we were able to reach a city official who made a bus available to us for transferring,” says O’Neil. “The entire evacuation and transfer process of 90 inpatients took only two hours, and there were no patient injuries.”

Considering Every Emergency Angle
When O’Neil and other leaders in the incident command center were overseeing the evacuation, they were also in touch with the state’s health department to gain credential approval for some of their own staff to transfer to the neighboring hospitals along with their patients.

“Through communication with the two other hospitals that were lending support, we had realized that a full evacuation would push them beyond capacity,” O’Neil says. “Our staff would need to follow our patients to those hospitals and provide continuity of care. While our licenses and other paperwork were up to date, we had to verify this procedure with the state.”

The approval process was smooth, and continuity of care was provided on the inpatient side as well as in the emergency departments at the other hospitals. In fact, Our Lady of Lourdes moved its entire nursing administration into one of the hospitals for the next 10 days. That’s how long it took demolition crews to clean and begin to restore the more than $19 million in damage caused to 100,000 square feet of the hospital’s ground floor.

Communication Is the Key to Preparation
As the potential for evacuation emerged, and as evacuation became necessary, O’Neil says the hospital’s staff kept patients well informed of the situation and the role they would play. “We were very prepared, and our staff and patients responded incredibly well. Our patients seemed more worried about us and all the issues we had to deal with and coordinate,” he says. “But every decision we made focused on patient safety.”

The hospital’s foresight in communicating early on with neighboring hospitals and its collaboration with local ambulance services and with the state’s health department, O’Neil says, reflects a culture dedicated to patient care and patient safety. “At every step, patient safety was the top priority,” Cappiello concurs. “Hospitals are often viewed as shelters in the case of emergencies, but even the best-laid plans can’t overcome an emergency that threatens a facility and its patients. This hospital resisted temptations to ride out the incident, to wait and see what would happen next. Instead, its leaders examined the realities before them and took action,” he says. “That’s an important lesson here.”

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Case Example: Flooding Threatens Hospital's Utility Systems, Tests Emergency Management Plan, continued

According to O’Neil, this experience has helped the organization strengthen its relationships not only with other health care systems but also with its community. “That is proving significant in our continued planning efforts,” he says. Renewed flood mitigation services also continued at Our Lady of Lourdes. The hospital installed valves and storm gates in its underground systems to help prevent water from seeping into its water supply. “While a permanent solution will take years,” O’Neil says, “we’re quite confident in our emergency planning process and our capability to provide our patients with safe care.”


References