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Dealing with disaster

Terrorism and naturally occurring catastrophic events provide fertile ground for nursing emergency preparedness, including deployment strategies. Are you ready to respond?

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Recent world events have created a new lens through which to view nursing's role in emergency management. Continuous preparedness, similar to preparation for Magnet designation or a Joint Commission survey, is no longer optional; it's critical for success in a highly competitive and complex healthcare market. Logi-

cally, it follows that nurse leaders are responsible for organizing and delivering nursing care that encompasses the essential elements of prevention/mitigation, preparedness, and response and recovery efforts in the continuum of comprehensive emergency management. Hospital leaders need to understand and support the infrastructure required to engage nurses in responding to emergencies or volunteering for deployment to affected areas.

An expansive scope

Terrorist events may involve chemical, biological, radiological, nuclear, and explosive (CBRNE) weapons. This assortment may evoke a variety of responses for nurses called to deliver patient care in these types of emergencies, as well as challenge the nurse's ability and willingness to respond. Nurse leaders need to be savvy in recognizing the nurses' ability and willingness to report for duty during uncertain times. (To view a range of public health threats, see Table 1.) Development and maintenance of a nursing emergency management, education, and deployment plan is critical to ensure the safety of staff, patients, families, and served communities.

An event can occur locally, regionally, or nationally. Crucial considerations for emergency staffing are based on whether the event involves a voluntary response to assist outside of your area of responsibility or whether it occurs at or nearby your facility, essentially negating the "voluntary" nature of the response.

What's in the books?

The American Nurses Association (ANA) Scope and Standards for Nurse Administrators identifies the global responsibility and accountability of the nurse executive for nursing practice, nursing education,

Table 1. Range of public health threats and root causes (2001 to 2006)

Threats	Root causes
Planes intentionally crashed (used as missiles)	International terrorist attack
Anthrax dispersion	Bioterrorism
Increased hurricane severity and frequency with direct landfall	Environmental
Nightclub fires	Manmade
Wildfires in western United States	Environmental
Sniper shootings	Domestic terrorism
Floods and landslides	Environmental
Volcanic eruption	Environmental
Potential for avian flu	Naturally occurring virus

Table 2. Nurse leader emergency response core competencies

Element	Objectives	Strategies
Assessment	Implement best practice for altered standards of care/triage. (Recommended text: VA Emergency Management Academy Knowledge Management Library 2006)	Ongoing literature reviews (http://www.ahrq.gov/research/altstand/altstand4.htm#authority); VHA Emergency Management Program Guidebook 2005 (http://www1.va.gov/emshg/pagetext.cfm?pg=114)
Technical skills	Oriented to and able to implement basic Hospital Emergency Incident Command System. Demonstrate ability to manage resources.	Nurse leaders complete online Federal Emergency Management Agency (FEMA) Incident Command System (ICS) courses 100 and 200. (Federal Emergency Management Agency. Incident Command System. Courses 100 & 200. http://www.training.fema.gov/emiweb/is/icsresource/icsrescntr_training.htm) Participate in regular facility drills.
Risk communication	Proficient in risk communication during critical emergency situations.	Nurse leaders complete risk communication training.
Critical thinking	Evaluate disaster situation. Prioritize care based on available resources. Assess situational awareness, response, and outcome trajectory.	Activate interdisciplinary resource experts related to altered standards of care.

Adapted from: Department of Veterans Affairs, Office of Nursing Services, National Nurse Executive Emergency Management Workgroup. VA Nurses Emergency Management Plan. Washington, DC. 2006.

professional development, nursing research, nursing administration, and nursing service within the organizational context.¹ Areas

related to staffing, information technology, and patient care services are critical dimensions for nurse leaders to address in developing and imple-

Table 3. Nurse leader responsibilities**Predeployment**

- ◆ Use Incident Command System (ICS) organization chart to disseminate and receive information.
- ◆ Put into place departmental plan to deploy staff, including plan for “backfilling” positions.
- ◆ Distribute competency validation packet (license, certification, BCLS/ACLS, checklist of clinical competencies).
- ◆ Provide deployed staff with cell phones and maintain close communication.
- ◆ Plan to track operational, labor, and capital costs.
- ◆ Document contingency plan in facilities with electronic point of care.

Postdeployment

- ◆ Be aware of deployed staff demobilization date.
- ◆ Provide adequate recovery period.
- ◆ Provide employee assistance as needed.
- ◆ Be in contact with staff to facilitate pay, travel reimbursement, etc.
- ◆ Verify appropriateness of staff for redeployment.
- ◆ Offer appropriate facility-based recognition.

menting a comprehensive emergency management plan—this isn’t unlike nurse leaders in Magnet organizations who have been identified as “knowledgeable and strong risk-takers who follow a well-articulated philosophy in the day-to-day operations of a nursing department.”²

There’s not much research on disaster nursing or emergency management nursing. Most studies center on defining nursing educational competencies. Few identified nursing leadership responsibilities, practice, or evaluation measures in disaster nursing or emergency management.³

Disaster nursing literature is primarily anecdotal in nature. Resources for nurse leaders on developing and implementing a comprehensive emergency management program are provided by the American Hospital Association (AHA), the Joint Commission, and the Federal Emergency Management Agency (FEMA).⁴

The following literature review includes citations from the body of published works related to nurse executive roles and responsibilities in disaster planning and response.

The gap in these citations highlights the need for nursing research in this area.

◆ Fahlgren and Drenkard (2002) delineate the role of the nurse executive in disaster planning and identify proactive critical decision making as a quality that nurse leaders must demonstrate in preparedness, which they concluded after experiencing the devastating effects of September 11, 2001.³ Decisions surrounding an event require both accurate assessment and efficient communication, each which require rapid response. The article determines that nurse executives are an integral partner to constructing and implementing a health system’s comprehensive emergency response plan. Their role in preparedness is to organize and communicate processes for staff recall, readiness education for patients and staff, protection of staff caring for patients, policy decisions, and fiscal accountability.

◆ Drenkard, et al (2002), cite experience gained by the nurse executive and other nurse leaders in response to the terrorist attack on the Pentagon and the anthrax exposures of 2001, highlighting nurse executive

decision making.⁵ The authors describe use of the nursing process in organizing and planning for an “all hazards” approach to disaster response. Additionally, hospital staff members were identified as “essential” and a skill set inventory was completed on each employee. The skill set inventory identified clinical, technical, and clerical ability.

◆ Aspects of team functioning and communication were addressed in the disaster nursing literature. Situational awareness and high-reliability teams were identified as important tools in implementing a hospital emergency incident command system.⁶ Improving disaster outcomes, through education and training on situational awareness, and team reliability were identified as important goals for a well-defined nursing emergency management program.

◆ Nurse leaders should provide an environment conducive to disaster education, preparation, and evaluation. Significant concerns surrounding workforce availability during and after events have been identified. In the aftermath of September 11, 2001, Quershi, et al (2005), studied healthcare workers’ ability and willingness to respond to disasters in 47 metropolitan New York healthcare facilities. Several barriers were identified relating to staffing during catastrophic events, such as transportation, child care, elder care, and pet obligations.⁷

Nurse leader competencies

A cascade of actions is activated by the Veterans Health Administration in preparing for response to events and mission assignments under the National Response Plan (NRP). The Department of Veterans Affairs, Office of Nursing Services, chartered a collaboration with the Emergency Management Strategic Healthcare Group (EMSHG) and

the National Nurse Executive Emergency Preparedness Workgroup to review disaster-related staffing procedures. One of the initial tasks of the group was to delineate disaster deployment activities and competencies to ensure quality nursing care. Core competencies were developed for nursing leaders and clinical staff from the EMSHG principles and a review of the International Nursing Coalition for Mass Casualty Education standards.^{7,8} The competencies were designed for preparing the nurse leader to respond to community emergencies and staff deployment. The nurse leader competencies described below are consistent with the each of the 14 Magnet Forces related to excellence in nursing care and improved patient outcomes.¹

Nurse leader disaster competencies are defined by four domains: assessment, technical skills, risk communication, and critical thinking. (For elements, objectives, and strategies of each domain, see Table 2.) The *assessment* domain elicits aligning best practices for altered standards of care during an event. *Technical skills* encompass the ability to implement the incident command structure and efficiently manage human materials and fiscal resources. *Risk communication* involves the ability to impart complex information simply, clearly, and efficiently during such events. Elements of *critical thinking* include problem solving and decision making based on priority appraisal and evaluation of the disaster event.

It's important that the nurse's skill set matches the requirements of the event. The nurse leader is well advised to have a straightforward discussion with staff members about the physical environment and working conditions they might encounter during deployment to a disaster event. Hallmarks of the

Table 4. Clinical staff nurse emergency response core competencies		
Element	Objectives	Strategies
Assessment	Describe essential elements included in a disaster scene, including safety for self, the response team, and victims.	Complete core curriculum; VHA Emergency Management Principles and Practices for Healthcare Systems
	Identify special needs groups of patients uniquely vulnerable during a disaster.	International Nursing Coalition for Mass Casualty Education Online Modules (http://www.incmce.org)
	Assess the immediate psychological response of patient(s), staff, family, and/or community.	Altered Standards of Care in Mass Casualty Events. AHRQ Publication No. 05-0043, April 2005
	Reorient staff to infrequently used skills and knowledge.	Participate in "just-in-time" training as needed at time of deployment.
Risk communication	Self-assess the ability to adjust to new realities, austere/unusual living and working conditions, and long shifts with little down time over an extended period.	Ability to reflect on response to physical and emotional stressors and the affect on health, performance, and interpersonal relationships.
	Have a tested personal and family preparedness plan.	FEMA (2004) Are You Ready?
	Know your facility's disaster plan and your unit response plan.	
Critical thinking	Demonstrate an understanding of security and confidentiality during a disaster event.	
	Demonstrate decision making and prioritization needed in a disaster situation.	VHA Emergency Management Principles and Practices for Healthcare Systems
	Identify the rationale for various populations and/or special needs groups, e.g. children, elderly, pregnant women, immunosuppressed, technology-dependent patients, and SCI/handicapped.	

Adapted from Department of Veterans Affairs, Office of Nursing Services, National Nurse Executive Emergency Management Workgroup. VA Nurses Emergency Management Plan. Washington, DC. 2006.

optimal nurse volunteer are: clinical competency, emotional maturity, adequate physical endurance, flexibility, adaptability, and the ability to exhibit resiliency.

Having identified the basic nurse leader disaster competencies, it's important to discuss the specific nurse leader pre- and postdeploy-

ment responsibilities. (See Table 3.) The nurse leader's responsibilities extend from the time of the request for volunteers through staff return and debriefing. Prior to deployment, the nurse leader should ensure that involved staff members have a competency validation pack and, where possible, are deployed

Table 5. Staff nurse expectations**Staff nurse expectations prior to deployment:**

- ◆ Where am I going?
- ◆ What do I need to take?
- ◆ What should be expected on arrival?
- ◆ How adaptable am I to austere and unpredictable circumstances?

Staff preparation prior to deployment:

- ◆ personal/family plan (child/pet care, bill paying, etc.)
- ◆ needed immunizations
- ◆ “travel savvy,” remaining flexible in unanticipated circumstances
- ◆ coverage for time away from home/work (2 to 3 weeks)

with mobile communication devices.

The staff nurse competency validation pack should include at least the following documents: nursing license, basic/advanced cardiac life support (BCLS/ACLS) certification, relevant specialty nursing certification, and documentation of relevant clinical competencies. A facility-issued cellular phone is an appropriate telecommunication device for deployed staff.

The nurse leader is required to demonstrate leadership disaster competencies, namely, understanding the Incident Command System (ICS), and an emergency management plan that includes tracking operational, labor, and capital costs. A plan to “backfill” positions at the sending institution and a contingency plan for patient documentation are also recommended. The nurse leader should be aware of the date for demobilization and staff return, allowing for adequate rest periods for the returning staff. Staff debriefing and assisting staff by managing personnel issues are important elements that the proficient nurse leader will identify. Ensuring appropriate facility-based recognition for the deployed staff’s willingness and ability to participate in the disaster event response is recommended.

A strategy for encouraging volunteers from the ranks of staff nurses is to create a Web site where

staff can locate information about deployment, elements needed for a useful personal/family preparedness plan, and a template for creating a plan, as well as obtain relevant emergency management and disaster nursing education. It’s critical to provide staff with a venue for information sharing regarding disaster management and response.

Clinical staff nurse competencies

Nurse leaders must ensure that the core competencies for clinicians identify the key skills set intended to prepare staff for conditions that may be encountered during events. It’s important for clinical staff to maintain proficiency and skills that are used infrequently, yet needed during emergency response situations. Updating competencies can be accomplished through an online or an annual review process and review of the current literature. Nurse volunteers need to be able to identify and match their current skill set and preparation with the necessary skills defined by the disaster event. There are three elements inherent in staff nurse disaster core competencies: assessment, risk communication, and critical thinking. (See Table 4.)

1. Assessment includes both self-assessment and situational awareness. An expert level of nursing assessment is needed to identify special-needs community-based

populations that are uniquely vulnerable during an emergency event. For example, this population may include members who are immunosuppressed, oxygen dependent, wheelchair confined, or in need of hemodialysis. An array of medically complex high-acuity nursing-care-dependent therapeutic modalities may be needed in these populations. **2. Risk communication** includes development of a tested personal and professional preparedness plan. Staff nurses must also be knowledgeable about their facility and community disaster plan. Additionally, they should remain keenly aware of concepts related to privacy, confidentiality, and infection control.

3. Staff nurse emergency response core competencies including **critical thinking**, prioritization, skillful clinical reasoning, and diagnostic decision making are essential. Nursing emergency response may require creative thinking and the ability to adapt and respond rapidly.

Recommendations

Pay careful attention to predeployment staff screening. An assessment of employee “fit” is critical to the nurse’s success and satisfaction while providing care in unusual and often challenging circumstances. With a wide range of public health threats possible, varied environmental conditions, and the uncertainty of the scope of the deployed nurse’s assignment, nurse leaders must be prepared to address countless issues. (See Table 5.)

Participants in voluntary disaster deployment should have a minimum of 1 to 2 years of clinical nursing experience and be above “satisfactory” in performance, attendance, and physical health. Other considerations in staff deployment include:

- ◆ individual staff member ability to participate in an accurate self-assessment of retained knowledge of patient care processes and procedures during disasters.
- ◆ provision of critical incident stress debriefing by qualified staff to all returning staff.
- ◆ use of electronic media for staff disaster education.
- ◆ creation of a Web site for nursing staff engaged in disaster response. The site can contain the required disaster education, template for creating a family preparedness plan, deployment checklists, and other locally defined response items.
- ◆ quarterly evidence-based literature searches forwarded to deployment eligible staff and/or placed on the facility Web site.

Armed appropriately

The past few years, nurse leaders have seen new levels of chaos and the emergence of new settings in which to provide care, mitigate, and react. Disaster response occurs in diverse settings, often in austere physical conditions and under heightened emotions. These condi-

tions may impact staff willingness to continue in a deployed role. Before recruiting or sending caregivers into a crisis situation, carefully consider the staff selected for deployment, the length of staff deployment, and potential challenges in the disaster environmental working/living conditions.

The nurse leader core competencies and responsibilities presented in this article are defined for unique situations. Additionally, the information shared provides contemporary nurse leaders with the "right stuff" to guide successful disaster preparation and response—while ensuring quality patient care. **NM**

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