

Editorial

SEPTEMBER 2011: A TIME TO REMEMBER AND PREPARE

By Cindy L. Munro, RN, PhD, ANP, and Richard H. Savel, MD



This month we commemorate the 10th anniversary of the September 11, 2001 (9/11), terrorist attacks on the United States. For the past 8 years, the federal government has designated September as National Preparedness Month and this year's theme is "A Time to Remember. A Time to Prepare."¹ We join the country in reflecting on the significance of that day, the changes wrought by the past 10 years, and the need to continue preparing for response to the unthinkable. Critical care practitioners have an important role to play in preparedness for both natural and human-caused disasters, and we have led the way in preparation and response. However, being prepared is an ongoing task and there is much still to do.

Some events are so striking and unforgettable that they change an entire generation. September 11, 2001, had a lasting effect on our national psyche and forever changed our view of disaster preparedness. On that day, more than 2600 people died at the World Trade Center, 256 died on the 4 involved planes, and 125 died at the Pentagon. The 9/11 Commission described it as "a day of unprecedented shock and suffering in the history of the United States," and added, "The nation was unprepared."²

In addition to the horrific events of 9/11, nature also produced catastrophic disasters during the past

decade. For example, the 2005 Atlantic Hurricane season spawned 4 major hurricanes that made landfall in the United States: Dennis, Katrina, Rita, and Wilma.³ All 4 storms caused American deaths and widespread damage. Hurricane Katrina alone was responsible for 1200 reported deaths and was the costliest hurricane in US history. Thus far in 2011, we have seen tornadoes of epic proportions in the Midwest and South as well as flooding on the Mississippi River and the Missouri River. International attention was focused this spring on the earthquake and subsequent nuclear problems in Japan.

The American Association of Critical-Care Nurses (AACN) Web site (www.aacn.org) posts messages of support for nurses affected by floods and other natural disasters, including a recent post to nurses who were involved in caring for victims of the Joplin disaster, aptly stating, "All of us prepare for this work and yet hope we never need to perform it."⁴ Much of our current ability to respond to calamities is a result of 9/11 and the attention it brought to disaster preparedness.

Taking an "All-Hazards" Approach

It is impossible to prepare for every specific type of disaster; we can rarely foresee the unthinkable. Current preparedness efforts are built around an "all-hazards" framework. This emphasizes a central core set of skills and knowledge that can be

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adapted to a variety of needs related to specific situations. This framework fits well with critical care reasoning and skills. Critical care practitioners have a unique set of skills and abilities that are vital for effective responses to natural or human-caused disasters and adaptable to many different circumstances. Critical care skills readily transfer to an all-hazards framework for disaster management.

Importantly, we have an intimate knowledge of the human response to trauma and to the critical illnesses that follow disasters. We have both theoretical and practical knowledge of the pathophysiology of severe trauma on the human body, and we have a deep understanding about the most effective and evidence-based care for physical trauma. Additionally, we have knowledge related to the psychological, social, and spiritual needs of patients and families in very stressful situations. We have researched interventions to mitigate problems and reduce the long-term consequences of life-threatening and life-altering events.

In addition to our knowledge, we also have direct experience in caring for victims of life-threatening events, including trauma. For example, the case report in this issue describes the care of victims of a mudslide in Italy.⁵ The skills needed to care for victims with crush injuries or shock following mudslides or tornadoes are the same skills that we have honed by caring for victims in more circumscribed emergencies, such as motor vehicle accidents. Our knowledge of and direct experience in dealing with the problems of critically ill patients and their families have direct application to the care of victims of natural or human-caused disasters.

Teamwork in the Face of Ambiguity

Critical care providers usually have a high tolerance for action in the face of imperfect or incomplete knowledge. The idea of the golden hour in the treatment of shock, stroke, and other illnesses has been well established in the critical care literature, thus we understand urgency in patient encounters.

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Critical care practitioners often can't know who their next patient will be. An all-hazards approach is built into our training to quickly and appropriately respond to patients who arrive in the unit. Disaster situations are often chaotic. Resources and knowledge about victims may be incomplete, and providers may have to intervene rapidly. Action in the face of ambiguity may be required in response to disasters.

Most importantly, critical care practitioners are a model for teamwork and interdisciplinary cooperation. Particularly in disaster situations, cooperation among the responders is a critical element of an effective response so that services are provided but not duplicated and the members of the team work in cooperation rather than in opposition. Mechanisms to establish chains of command and interagency cooperation have been developed in the aftermath of 9/11. Because of their daily interaction and care teams, critical care practitioners are ideally suited to mesh into this system of intraoperative capabilities, but work still remains to help individual providers effectively engage with that system.

To most effectively apply the knowledge and skills of critical care providers to disaster situations, we must plan ahead and be prepared. Individuals should begin by developing personal and family preparedness plans. The US government has spent considerable effort to help individuals prepare for disasters. The Ready Web site (www.ready.gov)⁶ offers a wealth of information about how to prepare oneself and one's family for disasters.

There are also professional preparedness plans. The Medical Reserve Corps (MRC)⁷ are volunteer organizations in which health care providers can learn about disaster response plans in their community, receive ongoing training, and be systematically deployed in the event that their skills are needed. MRCs depend on the volunteer efforts of physicians, nurses, pharmacists, respiratory therapists, and other health care workers to enhance a community's ability to respond to disasters. We encourage you to volunteer and become involved in your local MRC.

A Partnership of Critical Care

AACN is also interested in professional preparedness for its members. The National Teaching Institute, AACN's annual national conference, traditionally has several sessions related to disaster preparedness. There are often sessions reporting the experiences of nurses who cared for patients under dire and austere circumstances related to disaster.

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We encourage you to attend some of these sessions at next year's National Teaching Institute in Orlando, Florida. Other professional groups also have useful training resources. The Society of Critical Care Medicine, a sister society to AACN in the Critical Care Societies Collaborative, offers an interdisciplinary "Fundamental Disaster Management" course⁸ (for which Dr Savel serves as faculty).

Health care institutions each have their own disaster preparedness plans. Prior to 9/11, these were often created as part of institutional compliance with an attitude that they were not likely to ever be needed. Institutional disaster preparedness plans are now vital, not only to optimize institutional response to situations that directly affect the institution but also for dealing with surge capacity and secondary impacts of disasters. Every provider should have a thorough understanding of the disaster preparedness plans where he or she practices, and know what is expected of the individual in that plan. For those employed in more than one setting, reconciling potentially competing demands among employers is important.

Readiness for the Future

The health care professions have an important responsibility to educate our new practitioners. There have been a number of competencies related to disaster care endorsed by professional societies, and newer critical care textbooks include chapters about disaster management.⁹ The introduction of critical care experiences in professional education provides an all-hazards framework needed to effectively become a disaster responder, a knowledge base about human response to trauma, and direct experience in caring for patients with problems similar to those anticipated in disasters. An introduction to emergency and critical care, triage training, and basic responder skills should be part of the foundational education for every health care professional.

This month is an ideal time to reflect on the events of 9/11, and this anniversary provides motivation for ongoing preparedness planning. We appreciate the gains that have been made in all-

hazards preparation. We recognize that it is important to continue to prepare so we are well equipped to respond to those natural and human-caused disasters that are certain to occur in the future. Critical care providers should continue to lead the way. Ready or not, critical care providers will be on the front line in the response to the inevitable next event.

The statements and opinions contained in this editorial are solely those of the coeditors.

FINANCIAL DISCLOSURES

None reported.

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