

Critical curriculum for emergency management leaders: Three essential themes

Glen L. Woodbury, MA

ABSTRACT2

The discipline of emergency management has been evolving in scope and priority at an accelerating rate over the past decade. But the educational opportunities and focus areas have not necessarily kept pace with this change. While the volume of higher education curriculum has increased, three key thematic areas must be addressed as the baseline of knowledge for emergency management professionals: 1) hazard and threat science, 2) sociological and psychological considerations, and 3) prevention/mitigation principles.

INTRODUCTION2

The emergency management discipline has evolved significantly since its gradual transition from civil defense in the late 1970s and early 1980s to its current manifestation in the new millennium. This evolution has accelerated significantly since the dawn of the 21st century, and current demands require new tools and educational enhancements that were previously unnecessary, or at least not as critical as in today's environment. To ensure that leaders in the field are qualified, three critical areas of study must be addressed in emergency management education: 1) hazard and threat science, 2) sociological and psychological considerations, and 3) prevention/mitigation principles.

HAZARD AND THREAT SCIENCE

Any experienced emergency manager could specify the principle hazards that threaten their community or jurisdiction. Most could even provide background to the specifics of the threats and the science or history of the hazards. Much of this knowledge comes from either a typical postemergency analysis of

an event or from a gradual series of presentations and programmatic updates on specific hazards that are prepared for over a period of time. However, neither of these learning environments provides the deep understanding necessary for an emergency leader to effectively develop and implement *strategic* efforts to mitigate threats or to properly prepare for the response and recovery from their consequences. Additionally, the depth of understanding across the spectrum of hazards facing a community, business, or jurisdiction is unbalanced. For example, a Pacific Northwest emergency manager may understand, in geological detail, the three major earthquake threats to the region but may have little, if any, understanding of the finer points of Bovine Spongiform Encephalopathy (mad cow disease). Yet the response complexity and consequences of the latter may cause as much, if not more, economic and government confidence damage to the jurisdiction as would a minor seismic event. A Midwestern emergency manager may be able to go into excruciating detail about the genesis and meteorology of tornado formation, but if asked about the strategic objectives of a terrorist organization and how this knowledge might guide critical infrastructure protection priorities, the response might be silence.

Emergency management leaders need an academic, not just experiential, knowledge base of the natural and manmade hazards that face their regions or facilities. They need to know the science behind the threats, not just the potential, operational consequences should these hazards manifest themselves. The most effective curriculum would involve both the inclusion of all the hazards an emergency manager would have to address and a deep analysis of the science or

history behind each one. Senior leaders need the tools to develop and set in motion strategic measures to address their threats, not just simple, one-dimensional, preparedness and response operational activities. But education should not end with the delivery of deeper threat awareness. The emergency manager should also be taught high-quality research and analysis processes as well as strategic application tools in order to most effectively apply this type of knowledge.

SOCIOLOGICAL AND PSYCHOLOGICAL CONSIDERATIONS²

One of the flawed, yet widely believed assertions in the disaster field is that citizens will panic during a disaster. The entertainment industry has propagated this myth for decades in the depiction of fictional disasters rife with looting, rioting, and the struggle for personal survival at the expense of others. In reality, except for extreme, rare circumstances, individuals will rush to the aid of their fellow citizens even at the risk of their own safety. Unfortunately, this misunderstanding of the psychology of disaster victims and the actual societal response to emergency situations is not just an academic annoyance. Senior leaders in charge of preparing for disasters often presume that panic avoidance is a critical planning consideration for catastrophic scenarios, while the more probable challenge of managing masses of volunteers and self-responders is often ignored or minimized in preparation efforts. This is only one example of how a lack of understanding of the psychological and sociological realities in emergency preparedness can lead to ineffective response and recovery activities.

Senior emergency management leaders should possess a deeper understanding of how individuals process disaster scenarios as well as how to best connect with citizens on the front end of preparedness as well as in the recovery phase. What technique will encourage the most citizens to prepare for disasters they might face? Why are most public education campaigns only effective in a small percentage of those targeted? How will citizens react to an emergency alert system broadcast? Are critical incident stress debriefings helpful to responders and communities or do they do more harm than good in an unacceptable

number of those participating in them? The average emergency manager does not have the tools to properly consider the deeper psychological realities of the victim when they develop, promote, and execute programs that are designed to encourage, prepare, and direct these same individuals before, during, and after a disaster. Mental counseling efforts are an established component of a disaster field office's operations, but the importance, and therefore emphasis, to strongly support these activities may be absent due to a lack of education in this area. Efforts are stressed to rebuild a victim's financial and structural circumstances after a disaster, but the infinitely more important recovery of the emotional and mental health of a victim is not focused upon sufficiently.

How groups of individuals and communities react to emergency messaging and disaster scenarios is also critically important to understand. Some neighborhoods vigorously seek out community emergency response team training while others decline the offer even though individual perceptions of their risk to disaster events may be high. Employee groups of some companies and workers in high rise buildings collectively demand safety training while those elsewhere are apathetic, though not ignorant, to preparedness efforts. Understanding group dynamics is vital to effective preparedness campaigns as well as group direction during an event. This area of higher education should include curriculum covering the psychological, sociological, and physiological responses of individuals and groups to stressful and traumatic events. Effective emergency managers need to know how emergency directions, disaster scene environments, and postdisaster assistance are mentally processed by those targeted and affected.

PREVENTION AND MITIGATION PRINCIPLES²

The ultimate purpose of any emergency management leader should be to make themselves and their organizations obsolete through the definitive application of prevention and mitigation measures. The balance of resources responding to and recovering from disasters significantly outweighs investments in either preventing or at least minimizing the consequences of the event. Initially, Homeland Security

funds for local and state efforts were allocated for planning, training, and equipping emergency teams in the aftermath of an attack, not toward preventing one in the first place. Only recently have policies changed to invest more heavily in systems, doctrine, and equipment that will stop an attack or harden the targets that are most likely at risk. In the case of natural hazards, governments have been slightly more aggressive in mitigation emphasis. Flood hazard reductions, nonstructural mitigation for earthquakes, and more comprehensive programs, such as Project Impact, have reduced and even eliminated the catastrophic consequences of potential hazards. However, the proof of successful preventive policies and investments are not always clear (i.e., if they are done well, nothing happens). Additionally, shifting the allocation of funds from response programs toward prevention are ill advised since the cost benefit of preventive efforts are rarely realized in one fiscal cycle.

The perceived inability to prove the benefits of mitigation actions must be overcome in order to effectively argue for the policies and resources necessary to achieve a good preventive environment. Emergency management leaders require a higher level of understanding of risk management, cost-benefit analysis, land use planning, terrorist strategies and counter-terrorism programs, critical infrastructure protection, vulnerability assessment processes, and other areas that would enable a leader to advocate effectively for the application of

preventive measures. An effective emergency manager should be able to successfully convince elected officials and executives that investment in prevention measures are an effective application of a jurisdiction's or an organization's funds, even though the benefits may not be realized for several years. These investments may not pay off in a given term of office or may be so long term that the benefits are not perceived at all. Therefore, emergency management leaders must have the tools and education to argue for preventive policies regardless of the near-term political, economic, and physical barriers that challenge their implementation.

CONCLUSION2

Familiarity of emergency response operations, disaster rule applications, effective communications techniques, and executive administration are all good, transitional examples of the basic knowledge that emergency managers must possess. But to be effective in the implementation of policies and actions that *truly* reduce the impacts of disasters, emergency leaders must be educated more intensely in the background of the hazards they face, the human reactions to these threats, and the analytical and political tools to institute comprehensive prevention and mitigation policies.

Glen L. Woodbury, MA, Security Studies (Homeland Defense and Security), Naval Postgraduate School, Monterey, California.

FACTS

in BRIEF

PAHO OFFERS GUIDELINES ON MANAGING FATALITIES IN DISASTER SITUATIONS2

Major disasters throughout history have one thing in common: the enormous number of people killed. Successful management of mass fatalities is often hindered by lack of information and deeply rooted erroneous beliefs.

The Pan American Health Organization (PAHO) has released *Management of Dead Bodies in Disaster Situations* to guide decision makers charged with addressing mass fatalities. The timely and comprehensive guidelines are a great resource for the broad range of professionals called upon to act when disasters occur. For more information or to order the manual, visit PAHO Publications online at <http://publications.paho.org>.

Introducing!

Journal of

EMERGENCY MANAGEMENT®

470 Boston Post Road, Weston, MA 02493 • 781-899-2702 • fax 781-899-4900 • www.emergencymanagementjournal.com

Answers not theory!

When disaster strikes, you don't need a lot of theory, you need practical, straightforward, what-do-I-do-now answers. We've built our reputation on providing those answers and it's made us the journal of record for emergency management worldwide!

With its unique focus on emergency planning and response, disaster recovery, business disaster planning and business continuity, the value of *Journal of Emergency Management* will be readily apparent as you go through it. Let me simply add that guidance for this important journal comes from a nationally recognized team of the country's foremost hands-on EM experts. Their goal: to better equip you for those worst nightmares . . . from acts of terror, fires, floods and weather emergencies to gas explosions and catastrophic accidents on land, in the air or at sea.

So, if you're an EM director, First Responder, CST, CERT leader, Business Continuity Planner or other emergency management professional with responsibility for the safety and well-being of both personnel and property in either the private or public sector, I guarantee this is the journal you'll look to first because it's the one that promises to keep you and your team on the cutting edge of emergency management and disaster recovery as you deal with the next incident.

Now that you've seen your complimentary issue, don't miss another! **Subscribe today at the special show rate. Please use the order form below, or call toll free anytime at 800-743-7206, extension 108. Or to get your first issue even faster, fax the form to me at 781-899-4900 24 hours a day.**



Please start my subscription to *Journal of Emergency Management*

470 Boston Post Rd., Weston, MA 02493, 800-743-7206 x108, Fax: 781-899-4900

Published 6 times per year, Institutional Rate ~~\$208/year~~ **\$173/year at conference**

**Special
Save \$35
with this order
form**

Check enclosed Purchase Order # _____

Name _____

MasterCard Visa Discover AMEX

Title _____

Card no. _____

Institution _____

Expiration date _____

Street address _____

Signature _____

City _____ State _____ Zip code _____

Name on card _____

Tel () _____ Fax () _____

E-mail _____

For faster order service, call the Subscription Dept. Toll Free at 800-743-7206 x108 or fax this form to 781-899-4900, or return this form to the address above with payment.

Mention Code EMIWEB05 for special pricing