A Call to Arms

Disaster Preparedness for Anesthesiologists

By Kenneth Y. Pauker, M. D., Associate Editor, Vice Chair of Practice Affairs, Legislative and Practice Affairs Division

What could this possibly have to do with me as an anesthesiologist? I'm just here, minding my own business, practicing my chosen professional specialty, and, in the unlikely circumstance that some catastrophic event does occur right near here, someone will surely direct me toward where I should go to do what I usually do. I'm an expert anesthesiologist, well educated and trained to render care to all kinds of patients, including trauma patients, and even burn patients. I am already prepared to care for patients in a disaster. They have plenty of Emergency Medicine docs to get involved, to receive casualties, to triage, to get the injured ones screened and ready to come to me in my Operating Room where I am the king, where I have my tools, where I feel comfortable. There is a whole public health system set up to deal with disasters, right? There are family docs and intensivists and trauma surgeons aplenty, lusting to jump in headlong. Let them. Been there, done that. I'm a consultant now. They'll call me if they need me."

In actual fact, I do not know any anesthesiologist with sufficient conceit and ignorance to recite this mantra, or even much of it. My sense is that virtually all of us have come to appreciate that our world has been forever changed by the events of September 11, 2001: no matter what we thought we were doing in our professional lives before then, now somehow the world has grown smaller, and people and relationships have become more precious. We harbor a gnawing awareness that as citizen-anesthesiologists we have a special responsibility in our national life to be ready and willing to help if and when The Call comes. However, so many of us have a kind of free-floating, ill-formed, almost pregnant desire to be able to help, but do not understand exactly where to plug into the whole process in a personal and finite manner.

Enter the CSA and the CSA Task Force on Disaster Preparedness

In the aftermath of 9/11, the CSA Board of Directors, under then President Dan Cole, concluded that the organization ought to participate on some level in the process of disaster preparedness. A task force was established to develop the whys and wherefores of this notion.

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Initially, an unannotated list of various resources available on the Internet was compiled and posted to the CSA Website under a "bioterr orism" link. In time, a consensus developed that the purpose of the Task Force was "to obtain information, develop possible guidelines, and educate our fellow anesthesiologists so that they can be primed to participate in the process of Disaster Preparedness on an individual and local level." The Task Force held wide ranging discussions on possible projects and recommendations, but focused most of its productive energies on developing a Disaster Preparedness section within the larger CSA Web Site. Go to https://www.csahq.org (the CSA Web Site) to access this section, and then follow the link to "Public Health Issues."

For all anesthesiologists, but most especially for those of us who live in the land of the Big Shake, likely local disasters are not confined to chemical, biological, or nuclear acts of terrorism. In fact, a magnitude 8.0 earthquake centered in Los Angeles could produce 50,000 deaths, 90,000 injuries, and more than 1,000 critical burns, coincident with the disruption and loss of many primary-treating facilities. Furthermore, a well-intentioned but poorly trained clinician who arrives at the site of a Disaster to offer aid can quickly become another casualty needing support from local resources which are already stretched to their limit.

This then could be the starting point for an individual anesthesiologist on an educational journey into the emerging field of Disaster Preparedness: an organized structure of annotated links to clinically useful resources on the World Wide Web, easily accessible to any anesthesiologist with access to the Internet, and the interest and the time to plug in to what is out there, at any time, from anywhere, even during an actual disaster. That is the beauty of the Internet: the military constructed the original ARPANET to be decentralized and robust and redundant enough to survive nuclear war. It has evolved and grown dramatically since, but packets of electronic information continue to be routed around servers which are down or out of commission. Hopefully, our site can be mirrored so that even in a massive physical disruption in California, this resource could be accessed wirelessly from a remote location.

One could begin with how a disaster response is organized and the many levels in which an individual anesthesiologist can and should become involved, starting with the Disaster Committee and Disaster Plan in that anesthesiologist's own institution. How many of us have read our own local Disaster Plan and understand what we will be called upon to do if we are at work, or what we should do if we are at home? Have we thought clearly about what our priorities will be and how our ethical public health responsibilities will inform our per-

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sonal choices when the Big One hits? Next, there are links to basic clinical concepts and a framework for mass casualty management for anesthesiologists. How many ICU beds will be needed, and when does an event require regional, state, or national resources? In the section on Mass Trauma, there is a link (www.cdc.gov/masstrauma/preparedness/primer.htm#selected) to a primer for clinicians on explosions and blast injuries. How many of us remember or ever knew that "blast lung is the most common fatal primary blast injury among initial survivors" and that "a prophylactic chest tube (thoracostomy) is recommended before general anesthesia or air transport is indicated if blast lung is suspected?"

In the section on Weapons of Mass Destruction, there are links to excellent overviews by the Anesthesia Patient Safety Foundation on chemical, biological, and radiologic weapons, as well as links to richly detailed chapters in the online tome, *Textbook of Military Medicine*. Aren't you curious about the details of how ricin was used in the highly publicized assassination of the Bulgarian defector Georgi Markov in London in 1980, and what his course was, and what was the mechanism of his death?

There are links to anesthetic techniques suitable for disasters, including what equipment and drugs are needed to give a safe rudimentary general anesthetic under adverse conditions and other links to equipment used by the military but which would be unfamiliar to an anesthesiologist in clinical practice in the United States. There are numerous links to additional educational resources like downloadable palmtop applications, online courses, and even fellowships in this emerging field. The Disaster Preparedness section of the CSA Web Site was built to be a work in process, and as such, is unfinished and requires additional suggestions and subtopics to be constructed by future volunteers.

What has become the overriding conclusion of the CSA Task Force on Disaster Preparedness, as well as of many experts in this field, is that, like the delivery of health care and the workings of politics, all disasters are local. Neal Cohen espoused to our Task Force that we needed to find a way to engage anesthesiologists in a leadership role within their own institutions to develop a plan "based upon science and rationality," and to ensure that required resources are readily available. He further suggested that we provide fellow anesthesiologists some guidance on likely threats and how to address them, and to make accessing this information simple and straightforward and easy to find on our web site. We have made a start but still have considerable work left to do to fulfill this worthy suggested goal.

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The CSA Board of Directors is optimistic that this effort will begin to mobilize its members and others to educate themselves further in these critical areas before disaster strikes. Furthermore, the CSA hopes that the ASA takes up the gauntlet which we have thrown down and carry it with their considerable resources to the next level, enhancing and extending what we have begun, helping to formulate guidelines for the education, training, and experience of anesthesiologists in Disaster Preparedness.

2004 Cover Design "Masking Consciousness"

The CSA thanks the Wood Library-Museum (mask and ether can) and the Arthur E. Guedel Memorial Anesthesia Center ("Quiver and Gourd for Curare Arrows" from the Richard C. Gill Curare Collection, 1949) for their kind assistance, and for allowing us to use these images for the 2004 CSA Bulletin cover. We are particularly appreciative of the efforts of Carole Siragusa and Carol Brendlinger, photographers for these respective organizations. We also are grateful to Gabrielle Jackson (hand with mask sculpture) for another of her creative contributions. Furthermore, we recognize Jack Johnson of South Bay Software for his innovative design layout.

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