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## Convergent Volunteerism

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**See editorial, p. 463.**

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The response to the World Trade Center in New York City after the attack on and subsequent collapse of the towers in September 2001 has been scrutinized in hopes of increasing the effectiveness of multiagency emergency operations at large incidents and decreasing domestic vulnerability to the consequences of terrorism.<sup>1</sup> These reports have identified a need to improve dispatch and scene-response protocols for multiple-alarm incidents. They also emphasize the urgency of enforced adherence to such protocols. Many of the accounts published as tributes to self-dispatched volunteers in the medical literature<sup>2-9</sup> actually represent examples of the critical problems associated with management of this incident. Despite their compelling emotional content, these anecdotal reports of physicians who spontaneously decided to offer their services at ground zero must be placed in perspective so that the substantial risks and minimal benefits of convergent volunteerism are clear to medical professionals.

We define convergent volunteerism, a descriptive term of uncertain origin, as the arrival of unexpected or uninvited personnel wishing to render aid at the scene of a large-scale emergency incident. Once on scene, such personnel generally engage in freelancing, which we define as operating at an emergency incident without knowledge of or direction by the on-scene command authority.<sup>10-15</sup> Convergent volunteerism and freelancing by medical, fire, law enforcement, and other civilian personnel have been consistent compo-

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nents of regional responses to both natural disasters and incidents involving terrorism.<sup>16-22</sup>

The New York City emergency response community has documented some of the problems associated with convergent volunteerism at the World Trade Center disaster. A large number of well-intentioned volunteer physicians were observed in situations for which they were completely untrained and unequipped. Cook<sup>23</sup> cited medical oversight, accountability, liability, patient tracking, and safety as some of the problems that the freelancing physicians created for themselves and for the overall response. The New York Police Department deputy chief surgeon and the Fire Department of New York Emergency Medical Services (EMS) medical director described freelancing physicians as a major concern, particularly as they attempted to work on the hazardous debris pile wearing surgical scrubs and clogs. The efforts of these physicians often conflicted with Fire Department of New York EMS protocols, causing further confusion.<sup>24</sup> Problems related to crowd control, perimeter security, organization of volunteers, and volunteer safety were also recorded.<sup>25</sup>

Emergency physicians, those who practice at the interface between community incidents and the medical establishment, should recognize that convergent volunteerism and medical freelancing represent purposeful disregard for dispatch and response protocols at times when adherence to them is most critically required. Despite the participation of emergency medicine professionals in development, training, and enforcement of many of these protocols, the specialty's literature has not recently addressed just how dangerous, disruptive, and counterproductive medical freelancing can be during emergency rescue operations.

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#### CREDIBILITY OF REQUESTS FOR HELP

After the bombing of the Murrah Federal Building in Oklahoma City, reporters took it upon themselves to broadcast general requests for medical assistance at the scene, augmenting the medical volunteers who had spontaneously poured out of area hospitals in hopes of rendering aid.<sup>26</sup> Similar requests for on-scene medical

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assistance were made on September 11th by a variety of politicians, reporters, and well-meaning civilians (likely including physicians)<sup>25</sup> at the site and then broadcast widely. Such requests are generally not credible. If the incident commander or medical operations officer needs additional personnel, he or she will request functional, equipped, and trained organizational units through established operational channels. For incidents that are large, prolonged, or both, federal resources, such as the Federal Emergency Management Agency's Urban Search and Rescue Task Forces<sup>16,27,28</sup> and the National Disaster Medical System's Disaster Medical Assistance Teams,<sup>16</sup> can be requested through government channels.

However, erroneous media requests for help are far from the sole cause of convergent volunteerism. Freelancers will arrive at large-scale incidents regardless of media actions, but emergency physicians must be skeptical of such requests and should be familiar with the established routes by which their local emergency response systems will communicate with the medical community. The emergency response community, including medical providers, must be educated regarding conditions and mechanisms by which supplemental assistance will be requested from local mutual aid, state, and/or federal resources. Scene personnel, political leaders, and the media must know to refrain from making general requests for physicians, nurses, firefighters, or paramedics. Such requests must always be for organized responses by known entities and not for freelancing individuals or impromptu groups.

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#### SAFETY OF RESPONDERS

A broad spectrum of physical hazards could be present at disaster scenes, particularly those involving urban search and rescue. Threats include fires; unstable structures; ruptured gas mains; and chemical, biological, radioactive, and electrical hazards. Firefighters, hazardous material teams, and urban search and rescue personnel are trained and equipped to recognize and either mitigate or avoid such threats. Convergent volunteers rarely have appropriate training, personal pro-

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tective equipment, or support personnel to operate safely at an incident site.<sup>21,29</sup>

In addition, emergency response services rely on formal accountability systems to keep track of on-scene responders. Such systems allow the incident command structure to account for and appropriately use all personnel operating at a given scene. Volunteers converging on a scene will not be part of the local accountability system, and therefore, incident commanders and sector officers will be unable to communicate with, track, or appropriately use these volunteers. Scene officials might be unaware if a volunteer becomes trapped or buried, is assaulted, or otherwise encounters difficulty.

After the 2001 World Trade Center attack, the first Federal Emergency Management Agency Urban Search and Rescue Task Force, from Beverly, MA, arrived in the City of New York before the fires had been controlled, making rescue efforts untenable for their first 12 hours on scene. In addition, the Fire Department of New York incident commanders needed to reestablish command and control of the incident.<sup>30</sup> Because this fully trained and equipped team was kept away from the site for safety reasons by the Fire Department of New York incident commanders, there was clearly no safe role for the freelancing physicians who had descended on the scene. After the Murrah Building bombing, improvised treatment centers were established at unsecured locations, and 1 volunteer medical provider, a nurse working without training or equipment for urban search and rescue operations, was killed by falling debris.

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#### INTERFERENCE WITH OPERATIONS

Beyond an inability to operate safely and effectively, the volunteer physician can interfere with scene operations, detracting from the overall response.<sup>22,31</sup> In a 1989 collective review, Pepe et al<sup>31</sup> indicated that “fewer knowledgeable, designated rescuers perform better than many volunteers . . . well-intentioned, inexperienced volunteers who do not know how or where to fit in usually add to the confusion, or even inhibit the usual routine.”<sup>31</sup> Such simple things as the parked cars of convergent volunteers preventing ingress and egress

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of emergency vehicles or the cellular telephones of volunteers tying up needed communications resources can complicate and hinder the response.

Freelancing also defeats many of the advantages of the incident command system.<sup>15</sup> The need to feed, house, and toilet volunteers creates significant logistic problems for the home jurisdiction. Resources that could better be spent on the actual rescue effort often need to be diverted to providing for the needs of volunteers who were not requested and are not productively contributing to the response. It might be difficult to match volunteers' skills with real-time needs,<sup>16</sup> and the effort spent trying to do so might better be spent elsewhere.

All emergency responders must have their roles and responsibilities prospectively outlined in local and regional emergency response plans.<sup>32</sup> Specific roles and responsibilities are based on operational needs and individual qualifications. If emergency physicians are to have formal roles in the field, these roles must be clearly delineated in local and regional emergency response plans and must not adversely affect emergency department staffing.

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#### SECURITY

Secure perimeters are established around disaster scenes for several reasons. During fires, building collapses, and natural disasters, they are established to prevent entry of unqualified individuals into hazard zones and to prevent opportunists from looting or committing other crimes against victims or their property.<sup>33</sup> Where terrorism is known or suspected, perimeters are also established to limit access to crucial evidence that might bring the perpetrators to justice and to preclude entry by hostile individuals attempting to inflict further damage at the site. At very large incidents, law enforcement perimeters might protect the integrity of responders' supply caches, controlled substances, rescue apparatus, and equipment.

Fire officials in New York City noted that the police department at the perimeter allowed persons with essentially any type of hospital identification to pass

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through to the scene. Interns, nurses, and medical students without attending supervision were found running unauthorized triage and treatment areas and had to be removed from the area (Glenn Asaeda, MD, personal communication, February 2002). Medical identification, especially that indicating an individual might be a physician, can be very compelling to police officers, especially when they know that some of the victims are their fellow officers. Unfortunately, security perimeters cannot be established instantaneously, and freelancers rushing to the scene ahead of law enforcement are generally unimpeded. The more volunteers who gain access to the site during this early stage of an incident, the harder the task of clearing them off the site later.<sup>30</sup>

Within the local and regional emergency response plan, law enforcement personnel must have the authority to limit access by unauthorized personnel to incident scenes and be willing to aggressively exercise this authority.<sup>22</sup> Physician or hospital identification should not qualify any individual to access an emergency scene unless specifically requested by the command authority. Physicians with field roles in fire, rescue, EMS, or disaster response must have appropriate credentials and identification that will be recognized within the local system.<sup>34</sup>

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## MEDICAL QUALIFICATIONS

The same conditions that threaten the safety of responding physicians also severely restrict the applicability of their advanced medical skills. EMS personnel are trained and equipped to provide all care possible under the circumstances at hand and then transport victims for definitive care by physicians under more controlled conditions. Although physicians training for urban search and rescue task force roles learn how to apply their advanced skills under harsh field conditions, most emergency physicians are not trained or equipped to practice medicine here under these circumstances.<sup>21,22,27,35</sup> The provision of austere medical care under austere conditions is not sufficient; the standard is the provision of quality medical care under austere conditions.<sup>36</sup>

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Incident commanders have no mechanism in place for verification of volunteers' medical credentials.<sup>18,19,21,37</sup> Command staff has the responsibility to prevent unqualified bystanders from engaging in medical practice because patient safety is 1 of their 3 top priorities. Hospital identification or state licenses produced by unknown individuals at an emergency scene might or might not be legitimate, but without a means of real-time validation, they are irrelevant to an incident commander attempting to manage emergency operations in the field. This is one critical reason why physician field response, just like fire and EMS response, must occur under the auspices of existing agencies and not in the form of convergent volunteerism.

Physician participation in organized response teams can be challenging and rewarding both personally and professionally. Federal Urban Search and Rescue Task Forces and Disaster Medical Assistance Teams, as well as local or regional urban search and rescue and technical rescue teams, need emergency physicians to provide medical leadership.<sup>9</sup>

The Medical Disaster Response program developed by Schultz et al<sup>38</sup> in the mid-1990s and gradually being implemented in Orange County, CA, enlists physician volunteers to train to provide medical care in a disaster. After an earthquake, physicians trained in this program can establish "solo-treatment locations," where they can begin providing medical care using equipment from prepositioned medical backpacks. The plan involves emergency physicians, internists, pediatricians, family practitioners, and surgeons who complete specific training involving mass casualty triage, airway management, crush injury management, intravenous fluid administration, and basic command and control. This latter element is intended to allow the physician's role to be integrated with the overall response through the incident command system.

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## DEPLETION OF CRITICAL INFRASTRUCTURE

With very few exceptions, the best place for physicians (including emergency physicians) and most other hospital-based medical professionals to be during a disaster

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is either at the hospital<sup>22,31</sup> or resting in preparation for the next shift. The departure from the hospital of physicians and other health care professionals for a disaster scene can negatively affect a hospital's ability to respond to the needs of its community. Both in terms of numbers of physicians available and the expertise of these physicians, the emergency physician who is scheduled to work a shift should not risk his or her emergency department's response capabilities by freelancing at emergency scenes.

Even if the EMS system is not transporting significant numbers of patients, an ED might be unable to provide the surge capacity needed to deal with a sudden onslaught of ambulatory patients who present for evaluation<sup>39</sup> if its physicians and other medical providers are in the field. EDs outside the immediate disaster area might receive patients and will continue to receive their typical patient flow. There were 3,957 other 911 EMS calls in New York City on September 11, 2001, and 3,154 other 911 EMS calls on February 26, 1993, the day of the first World Trade Center attack (Glenn Asaeda, MD, personal communication, February 2002). The patients that these calls generated needed to be cared for by emergency physicians in their EDs.

ED staffing needs are not short-term issues in disasters. Although an emergency physician who is not scheduled for a shift for a day or 2 might see this as an opportunity to work at the disaster site without affecting ED staffing, he or she might find that fatigue, stress, or injury could prevent a timely return to ED work. The federal government recognizes that a prolonged (days to weeks) disaster response is often needed and that local capability to allow personnel adequate rest before returning to work might quickly be overtaxed. As recently as 2000, a recommendation was made to provide significant operational planning for second-wave response capabilities from outside agencies when local resources are depleted by first-wave response activities.<sup>40</sup> Depletion of either first-wave or second-wave ED capabilities because of freelancing is unacceptable and must be avoided if possible.

Finally, as was noted in the review of Fire Department of New York operations at the World Trade Center

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collapse,<sup>1</sup> freelancers caused significant loss of critical emergency response infrastructure by engaging in unassigned tasks after bypassing formal staging areas. Incident command was forced to keep calling for additional outside resources because neither the command post nor staging officers knew what units or personnel were on scene and were therefore unable to assign them to the prioritized tasks.

Hospital disaster plans must outline the roles of emergency physicians. Mechanisms must be in place to ensure adequate ED staffing for predictable surge capacity, allow for adequate rest for off-duty physicians, sustain extended disaster operations, and account for the absence of physicians with designated field roles.

In summary, the time has come for the house of medicine to recognize the need for a unified voice on the role of physician volunteers. Clearly, physicians in general and emergency physicians in particular are a crucial component of the disaster response capability of any community. It is important, however, to focus on how the emergency physician can best contribute to a response, using his or her specialized skills to their best advantage. It is our position that physicians might best contribute to their community's response capability by playing proactive roles in community or institutional emergency planning and, for those so inclined, prospectively becoming trained, credentialed, and integrated as members of EMS systems and emergency response teams within local, state, regional, or national emergency response plans.<sup>21,34</sup> Even with proper field training and equipment, the emergency physician must avoid freelancing. Physicians' roles must be prospectively formalized and adhered to, irrespective of whether they include response with field units during emergency operations.

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