PRACTICE ALERT

Public health issues influencing your practice

Disaster medical response: Maximizing your effectiveness

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In the aftermath of Hurricane Katrina, physicians and other health professionals volunteered for deployment to the affected area to provide medical services. The frustrating reality most of them encountered was the incapacity of those in charge to use the number of professional volunteers expressing interest.

Lesson: Build the infrastructure to support professional volunteerism

Untrained volunteers, though well intentioned, are often not that helpful. The immediate needs of a disaster area relate to public health and other safety issues. Until a proper infrastructure is re-established, general medical services cannot be provided. Physician services are most effectively provided in collaboration with, or as part of, an organized local response agency.

First things first

In addition to immediate loss of life and injuries caused by a disaster—natural or man-made (eg, war, terrorism)—mass disruption of the local infrastructure and relocation of a large segment of the population pose ongoing threats to health. The most crucial services to re-establish include adequate clean water, sanitation, food supplies, vector control (eg, insects and rodents), shelter, and immunizations. Also essential is establishing surveillance systems to rapidly assess needs and to detect disease trends.

Tasks that can wait

Contrary to what is commonly believed and stated in the press, rapid burial or cremation of cadavers is not an immediate need. Bodies almost never pose a serious public health threat. Moreover, rapid disposal of bodies can deprive families of knowing what happened to their relatives and cause psychological harm as well as legal and economic hardships.

Epidemics can occur but they usually result from respiratory or gastrointestinal pathogens caused by poor sanitation, inadequate water supplies, and overcrowding in inadequate shelters. Public health surveillance systems are important for detecting, tracking, and controlling such outbreaks.

Physicians as volunteers

Volunteer physicians are most effective following a disaster if they understand the importance of re-establishing the needed infrastructure, and if they arrive on scene as part of an organized response, having been trained in disaster medicine and public health. Disaster Medicine is becoming a recognized field of medicine with its own set of skills and an evolving literature base and training materials and courses.

After the immediate post-disaster period, it often takes a prolonged period of time to re-establish basic medical services. During this phase, volunteers

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FAST TRACK

Volunteers are more effective when they are part of an organized response and are trained in disaster medicine and public health

Other training opportunities

If volunteering for deployment to other regions is not something you're likely to do, but you live in an area vulnerable to, say, tornadoes or earthquakes, there is plenty you can do to prepare for disaster.

The AMA offers 3 courses in basic disaster response: Core Disaster Life Support (CDLS); Basic Disaster Life Support (BDLS); and Advanced Disaster Life Support (ADLS). Details are available at the AMA website: www.ama-assn.org/ama/pub/category/12606.html.

The CDC offers web-based training materials in the medical and public health response to an array of natural and man-made disasters (available on the Web at www.phppo.cdc.gov/phtn/default.asp).

You can also assist your local health department in planning for the most likely disasters in your area.

continue to be needed but are harder to recruit. Mental health professionals are especially useful to assist with the post-traumatic stress and grief issues common after disasters.

If you would like to become part of organized disaster response team, you have several options.

The Medical Reserve Corps

The Medical Reserve Corps (MRC) is a program started by the federal government after the terrorist attacks of September 11, 2001. It is part of the Citizen Corps, which is one component of the USA Freedom Corps (www.usafreedomcorps.gov). The purpose of the MRC is to organize local groups of medical and public health professionals to prepare for and respond to local and national emergency needs.

The Office of the Surgeon General coordinates the MRC program. This coordinating function includes recognizing and listing MRCs, offering technical assistance, serving as a clearinghouse of information for local MRCs, and offering training. Physicians interested in joining a local MRC can check on the MRC home page (www.medicalreservecorps.gov) to see if one has been organized their area. If no MRC exists in your area, you can help start one with the approval of the local Citizen Corps Council (www.citizencorps.gov/councils).

Since the MRC is a federal program—albeit relying on local organization and initiative—it is not clear how well local MRC units are fitting into the local, state, and national disaster relief infrastructure. Reportedly at least 20 MRC units assisted with relief efforts in Louisiana after Katrina. The MRC is intended to serve as a local resource and to augment the public health workforce should mass immunization or antibiotic distribution be needed.

Disaster Medical Assistance Teams

Disaster Medical Assistance Teams (DMATs) are part of the National Disaster Medical System, under the auspices of the Department of Homeland Security. The role of these teams is to provide medical care in a disaster area.

As stated in DMAT promotional material, "DMATs deploy to disaster sites with sufficient supplies and equipment to sustain themselves for a period of 72 hours while providing medical care at a fixed or temporary medical care site." In incidents with large numbers of casualties, DMATs responsibilities include "triaging patients, providing high-quality medical care despite the adverse and austere environment often found at a disaster site, and preparing patients for evacuation." DMATs may also provide primary medical care or may augment overloaded local health care staffs.

Under those unusual circumstances when victims of a disaster are evacuated to

another location for their medical care, "DMATs may be activated to support patient reception and disposition of patients to hospitals. DMATs are designed to be a rapid-response element to supplement local medical care until other Federal or contract resources can be mobilized, or the situation is resolved."

DMATs are organized by a local sponsor—a medical center, local public health agency, or a nonprofit organization. The responsibilities of the sponsor include recruiting DMAT team members, training, and organizing the dispatch of team members if called upon. Members of DMATs become temporary federal employees when deployed; this provides them liability protection through the Federal Tort Claims Act. In addition, professional licenses of federal employees are recognized by states, freeing DMAT team members from state licensing concerns.

To become a member of a DMAT, you must fill out a Federal Job Application form, be interviewed, and accepted as a team member. The NDMS has 10 regional offices (detailed at www.oep-ndms.dhhs.gov/region_1.html) where information can be found about existing DMAT teams and how to form a team. The DMAT home page is www.oep-ndms.dhhs.gov/dmat.html.

Search-and-rescue teams

Local fire departments and law enforcement departments frequently have search-and-rescue teams that can be called on to respond to disasters throughout the country. When these teams are deployed, they should take along medical personnel to attend to the needs of the responders. The medical professional should be prepared to screen responders and provide medical clearance before they deploy, provide urgent care medical services to responders, and ensure that measures are taken to prevent illness among team members. ■