

Incident Management and Support was used to introduce concept of disaster medicine. To educate disaster medicine physicians, the Basic Disaster Life Support/Advanced Disaster Life Support and the Advanced Hospital Life Support were applied with support from the University of New Mexico.

Results: Local residents, including public and medical personnel, began to acquire a general idea of disaster and emergency medicine. The educational programs motivated healthcare professionals. Simulated disaster drills adapted to the local situations will be performed.

Keywords: disaster; earthquake; layperson; preparedness; tsunami
Prehosp Disast Med 2009;24(2):s105-s106

(H78) How Well Are Healthcare Institutions Prepared for Disasters?

Joris Yzermans

NIVEL, Utrecht, Netherlands

Introduction: The better healthcare providers are educated and trained and the more they practice their skills, the more they are prepared when disaster strikes. However, little is known about the current state of preparedness for managing disasters among healthcare providers.

Methods: Representatives of all healthcare institutions in the Netherlands (hospitals, accident and emergency departments, ambulance services, regional health authorities and their branch organizations) were interviewed about the preparedness of their institutions.

Results: The response rate was 75% (n = 211). Nearly half of them were educated in specific skills for managing disasters and 77% practiced those skills at least once in the past 12 months. Most exercises were internal and not mono- or multidisciplinary; were tabletop and not real-life; and concerned “flash crisis” and not pandemics, floods, or chemical incidents. The majority of respondents (84%) recommended that the authorities standardize tasks and functions because the current state of preparedness is too informal and lacks uniformity and quality. The bottlenecks mentioned most frequently were lack of resources, capacity, commitment, and mutual communication.

Conclusions: Ambulance services were better prepared than the other institutions. Some years every hospital is obliged to implement a regional hospital emergency management plan. This obligation gave an important impetus for better preparation, but there still is a need for standardization. Besides, there is too much focus on “common” disasters, and there still is a lack of urgency among most healthcare providers.

Keywords: capacity building; disaster; education; healthcare institutions; Netherlands; preparedness

Prehosp Disast Med 2009;24(2):s106

(H79) Utility of and Risks Associated with the Use of Spontaneous Disaster Volunteers in Disaster Response

Lauren M. Sauer; Christina L. Catlett; Thomas D. Kirsch

Johns Hopkins University, Baltimore, Maryland USA

Introduction: Spontaneous volunteers (SVs) are ubiquitous after any disaster and many organizations use them.

Their limited training or experience can create a hazardous situation for both the SVs and the organization. This study assesses organizations’ experiences with SVs during a disaster response, how they were integrated into the agency’s infrastructure, and the perceived value of the volunteer force to their past responses.

Methods: A telephone survey of organizations affiliated with the National Volunteer Organizations Assisting with Disasters (NVOAD) was conducted. The survey assessed SV training, management, and liability issues.

Results: Twenty-three of the 49 (47%) organizations responded, of which, 78% encountered SVs during a response. Of these, 77% used SVs in the field. Many (67%) felt that SVs were useful. When managing SVs, only one organization always credentialed them, and 33% sometimes credentialed. Fifty-six percent never perform background checks. Only 22% conducted post-event performance evaluations of SVs. Half provided “just-in-time” training for SVs prior to assignment and 22% provided health or workers compensation benefits. One organization reported the death of an SV, while 39% reported injuries. Twenty-eight percent accepted legal liability for the actions of SVs and 11% were sued because of SV actions. One organization was sued by an SV.

Conclusions: The use of SVs is widespread, but organizations are not necessarily structured to incorporate them effectively. There are significant health and legal risks associated with the use of SVs. More structured efforts to integrate SVs are critical to safe and effective disaster response.

Keywords: capacity building; credential; disaster response; preparedness; risks; spontaneous volunteers; task-sharing

Prehosp Disast Med 2009;24(2):s106

(H80) International Non-Governmental Organizations’ Roles in Disaster Preparedness in Developing Countries

Lisa M. Hilmi;¹ Eeshara Kottegoda Vithana;²

Anil Jasinghe;² Robert B. Bristow;³ Satchit Balsari;³ Hillarie Cranmer;⁴ Dudley Perera¹

1. AmeriCares Foundation, Nawala, Sri Lanka

2. Ministry of Health, Colombo, Sri Lanka

3. Columbia University; New York Presbyterian, New York, New York USA

4. Harvard Humanitarian Initiative, Boston, Massachusetts USA

International non-governmental organizations’ (INGO) resources and global expertise can strengthen disaster preparedness in developing countries. Collaborating with local governments and hospitals, medical professionals, and military, INGOs can leverage technical and financial resources for training courses, disaster drill exercises, preparedness evaluation, material support, and educational tools. Sustainable preparedness is promoted using the partnership model.

AmeriCares, a disaster response INGO, supported three disaster drills in Sri Lanka and India in 2007–2008, along with a Trauma System and Emergency Medicine project. The INGO collaborated with the World Health Organization, American universities and hospitals, local governments, hospitals and the Ministry of Health, military, non-governmental organizations, the Red Cross, and private organizations. Mannequins and equipment were

donated for clinical courses and disaster medicine professionals donated training time. A regional conference was held to discuss regional activities and trends.

Minimal funding yielded great achievements including training courses for >1,200 medical responders, the creation of drill evaluation tools and videos, the establishment of training centers, an injury surveillance system, and the development of clinical pocket references. Networks were expanded through multi-country collaboration, and regional lessons were learned.

The sustainability of disaster preparedness and response must be accomplished in collaboration with the local stakeholders in planning, implementation, and evaluation. International non-governmental organizations can facilitate positive disaster preparedness and response outcomes in developing countries and maximize the expertise within the country. They can promote follow-up activities, evaluate drills and training, and be valuable in the process because of their networks and international associations. Through minimal funding, many results can be achieved. Drills and disaster training prove to be a valuable method of multi-stakeholder collaboration in disaster response.

Keywords: AmeriCares; drills; international non-governmental organizations; preparedness; training

Prehosp Disast Med 2009;24(2):s106–s107

(H81) Major Influences on Hospital Emergency Management and Disaster Preparedness

Lauren M. Sauer,¹ Melissa L. McCarthy,¹ Ann Knebel,² Peter Brewster³

1. Johns Hopkins University, Baltimore, Maryland USA
2. US Department of Health and Human Services, Washington DC USA
3. Veterans Health Administration, Washington DC USA

The role of hospitals in the community response to disasters has received significant attention during the last decade. In the event of a disaster, the community expects hospitals to provide acute care medical services to victims and healthcare resources to other facilities in need. There have been several initiatives to guide the hospitals' roles in these events, and to assist hospitals in their effort to prepare for them.

This project is focused on the efforts of four distinct groups: (1) The Joint Commission; (2) the executive branch of the United States government; (3) Congress; and (4) the Department of Health and Human Services. The objective is to determine the way these groups' initiatives affect hospitals and the healthcare system.

These four groups take vastly different approaches to meeting common goals. These approaches include operational standards, legislation, and guidance documents. Despite the different approaches used to assist hospitals in improving their emergency management capabilities, the initiatives reinforce each other and have resulted in an increased focus by hospitals on disaster preparedness, response capabilities, and community integration.

There is still significant work to be done with regards to improving hospital and healthcare system response capabilities. While community integration is critical to hospital response successes, there is a need for guidance designed

for and directed specifically towards hospitals. The continued improvement of hospitals' response capabilities will depend in large part on the guidance and support of these four key groups.

Keywords: emergency management; hospital; preparedness; response

Prehosp Disast Med 2009;24(2):s107

(H82) Community Capacity Building in Earthquake Preparedness in Colombia: Lessons Learned from a Survey of Perceived Needs

Sandra I. Castelblanco Betancourt,¹ Ayan Sen²

1. Department of Emergency Medicine, Henry Ford Hospital, Detroit, Michigan USA
2. District Health Secretariat, Risk Management Office, Bogotá, Bogotá, Colombia

Background: A fundamental goal of community capacity building is to enhance the ability to prepare and respond to a major incident based on needs perceived by the local population in the "disaster fronts". Bogotá's (Colombia) District Health Secretariat Risk Management Office, accountable for the city's response to a disaster, has formulated a Medical Earthquake Preparedness Plan, which comprises community needs perception as one of the salient features to achieve higher training impact and effectiveness. Previously, top-down and command-and-control approaches were used, and proved to be ineffective.

Methods: A questionnaire-based survey is being conducted among residents of Bogotá who live in seismically active regions to assess their perceived needs for an earthquake disaster preparedness training program. The survey includes respondents' evaluations of their situation based on their experiences. Their perception of vulnerability and capacity will be explored. Training inputs will be sought in regard to the content and methodology of delivery of such programs. Descriptive statistics will be used to summarize the data. When appropriate, a two-tailed *t*-test will be used to compare the responses of various groups. A *p*-value <0.05 will be statistically significant.

Results: The results will be presented at the Congress.

Conclusions: Population surveys about earthquake preparedness training programs will lead to wider stakeholder participation, ensuring the sustainability of such efforts. This will strengthen the local community capacity to face hazards of a major seismic event in Bogotá, Colombia.

Keywords: Colombia; capacity building; community; disaster; earthquake; lessons learned; needs; preparedness

Prehosp Disast Med 2009;24(2):s107

(H83) Utilizing Paramedics to Provide In-Hospital, Critical Care Surge Capacity

Michael J. Reilly; David S. Markenson

New York Medical College, Center for Disaster Medicine, Valhalla, New York USA

Introduction: The emergency medical services (EMS) system is one of the key components in disaster, terrorism, and public health emergency response. In the United States, the paramedic is the most highly trained prehospital medical