

local government or emergency services should be delegated to a member of this team to ensure resource coordination and approach integration where necessary. The location of this team also requires significant planning, and requirements like communications, space, signage, and equipment are addressed.

In addition, plans should include processes for incident notification and activation, staff management, casualty registration and management, media and resource/supply management, crowd control and perimeter security, documentation, and evidentiary care expectations.

Developing a hospital disaster plan is a challenging task that relies on the use of a strategic framework for success. This presentation will highlight critical elements to be considered in hospital disaster planning identified within the Western Health Service in Melbourne, Australia.

**Keywords:** disaster; effectiveness; hospital; planning; process; team  
*Prehosp Disast Med* 2007;22(2):s120–s121

### (203) Development of the Local Disaster Medical Assistance Team System in a Local Government and the Tohoku Region of Japan

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Ever since the Kobe earthquake, Japan has authorized hospitals that treat disaster victims; presently 550 hospitals are authorized. However, the level of preparedness of each individual hospital differs. Some authorized hospitals do not even train for disasters. In addition, only a few local governments mandates require evaluation of the disaster medical system. Disaster Medical Assistance Teams (DMATS) are based at the disaster hospitals, but the role of DMATs (except for the Tokyo DMAT) mainly is focused on nationwide aircraft evacuation—no local DMAT system copes with local accidents or disasters. The local disaster management system is not sufficient in Japan, the disaster hospitals and DMATs are not able to function in actual disasters. In view of this situation, the local government has organized “Yamagata Prefectural Disaster Medical Hospital Communication Coordination Conference (YDMC)”, and developed a communication and coordination system, an education system, and a local DMAT system that copes with local accidents or disasters (Yamagata DMAT). The same system will be developed in the Tohoku Region to improve the relationship of the the inter-local DMATs.

**Keywords:** disaster medical assistance team; hospital; Japan; government; preparedness  
*Prehosp Disast Med* 2007;22(2):s121

### (204) Orthopedic Preparedness vis-a-vis Capacity Development: Observations from a Tsunami Medical Relief Camp in India

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**Introduction:** The 26 December 2004 Asian Tsunami impacted the world in many ways.

Over 220,000 lives were lost and properties and infrastructure worth billions of dollars were destroyed in 12 countries.

**Methods:** After obtaining mandatory governmental approvals, a Tsunami Medical Relief Camp became operational on 07 January 2005 at the Bishop Peter Teachers Training Institute at Devenampattinam, Cuddalore district, Tamilnadu, India. International, interdenominational Christian donor agencies partnered with the Christian Medical College & Hospital (Ludhiana), National Lutheran Health & Medical Board (Chennai), Christoffel Blinden Mission International, CSI Somervel Medical College (Karakonam), Joseph's Eye Hospital (Trichy), Bethesda Hospital (Ambur), Academy of Disaster Management—Education, Planning, and Training (ADEPT, Chennai), and Martin Luther Christian University (Shillong) India.

**Results:** Data from patients undergoing orthopedic surgery and other procedures performed at the Camp will be presented.

**Conclusion:** Although the partners/volunteers had varied prior experiences in working during various disasters and mass casualty incidents, observations and the analysis of the data collected from the Tsunami Medical Relief Camp led to the conclusion that further research on orthopedic preparedness and other aspects of capacity development is necessary.

**Keywords:** capacity development; disaster; donors; medical relief camp; orthopedic; preparedness; Tsunami

*Prehosp Disast Med* 2007;22(2):s121

### (205) Importance of Population Self-Sustainability in Crisis Situations

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In the current age of fast technological advancement and globalization, there is an increasing awareness of the disasters occurring around the world. The increasing world population, changes in the environment caused by the exhaustion of natural resources, and the increasing imbalance in the distribution of assets are either direct or indirect results of humanity.

For the most part, disaster and crisis management, especially in the developed world, have mostly been addressed through crisis-prevention programs by the government and supporting governmental bodies. These programs have been entrusted with the task of protecting the

population, especially in times of emergencies. However, it is questionable whether this is a realistic approach.

From various, recent international reports, it appears that sea levels may rise between a 0.5–7 meters in the coming decades. In such case, the government, essentially, may become powerless or ineffective, as demonstrated following the recent disaster from hurricane Katrina (US, 2005).

The question, therefore, is: what can the population do to prepare itself and increase sustainability in the face of possible future disasters? This presentation will delve into these issues and provide practical guidelines and advice that can help increase self-sustainability.

**Keywords:** climate; crisis-management; disaster; population; preparedness; sustainability

*Prehosp Disast Med* 2007;22(2):s121–s122

### (206) Preparing Citizens for Emergencies by Using Ubiquitous Learning Methods

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During the first minutes of an emergency, prior to the arrival of professional rescue workers, citizens must take care of themselves and their family mainly on their own. As a result, their self-management capabilities directly influence the health outcomes of terrorist attacks or disasters caused by natural hazards.

While governments acknowledge the importance of citizen self-management during emergencies, however, traditional information campaigns to motivate citizens to prepare themselves often seem to fail. One of the potential causes for this failure might be that these campaigns seldom are adapted to the specific knowledge, skills, and motivational needs of the individual citizens.

Ubiquitous learning principles may be useful in this context. The definition of ubiquitous learning is learning whenever and wherever it is desired or needed and is facilitated by use of a flexible mix of mobile technologies (personal digital assistants (PDAs), smart phones, game consoles) and interactive, adaptive didactical strategies.

Rather than providing everyone with the same information, this approach offers essential content using a range of content varying from games and simulations, and checklists. Citizens are encouraged to actively search information or entertainment that matches their interest. Once downloaded to a mobile device, the information is available even when networks go down during an emergency, and can be used to access information during an emergency.

**Keywords:** citizens; disasters; emergencies; preparedness; ubiquitous learning principles

*Prehosp Disast Med* 2007;22(2):s122

### (207) Implementation of Emergency Medical Service

### during the Primary Stage of a Disaster: The Emergency Response Plan of the National Museum of Natural Science

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With the growth of exhibitions, exposition, sports and live concerts, the capacity of auditoriums, stadiums, exhibition halls and convention centers will become larger to accommodate more crowds. However characteristics and complexity of the above structures generate the demand of emergency response far beyond the traditional plans for the ordinary structures like office buildings and schools. In museums, the remodeling for new exhibition could change the route of evacuation, modify utilization of the space and even add some inappropriate materials by decorations. All these factors will produce impacts on emergency. The plan for mass-rally space such as museum will require a specific strategy to cope with the large amount of casualties and evacuation. The National Museum of Natural Science, attracting 3,505,495 visitors in 2005, is the most popular one in Taiwan and the pupils of elementary schools contribute to the main part of visitors. As the consequence, the necessity of emergency plan will become a major concern from the general public. This article will describe the seismic emergency plan for museum on the issues of modeling to estimate the number and category of causality and establishing the response plan and standard procedures for medical deployment. Furthermore, the cooperation and collaboration with EMS of fire department and DMAT of local hospitals will advance the practical application under emergency and improve the safety of audiences.

**Keywords:** disaster; emergency medical services; planning; preparedness

*Prehosp Disast Med* 2007;22(2):s122

### (208) Health Issues of Women Refugees in Canada: A View from Kosovar Women and Sponsor Groups Involved in Settlement

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**Introduction:** After the 1999 Kosovo crisis, approximately 500 refugees from Kosovo arrived in the city of Hamilton, Canada. Volunteer sponsor groups affiliated with a local settlement agency assisted the families with settlement. This study describes experiences and issues identified pertaining to the women's health after their arrival.

**Methods:** Both quantitative and qualitative methods were used. Women from 50 randomly selected families self-completed questionnaires about their health, the Harvard Trauma Questionnaire, and use of preventive health services. Sponsor groups participated in focus groups regarding the issues faced when assisting the Kosovars. Three analysts coded transcripts for themes to reach consensus.