

Special needs populations are often excluded from emergency preparedness plans, despite their vulnerability. As defined by the CDC one aspect of special needs is physical disabilities which include mobility issues. In 2009 the CDC reported 16% of the US non-institutionalized population as having a physical disability. The literature is limited and empirical evidence on addressing the needs of disabled individuals in disaster preparedness is sparse. This demonstrates the need for guidelines on how to plan for the needs of individuals with physical disabilities during disasters. In July 2010 a coalition of hospitals in Central Brooklyn, NY, University Hospital Brooklyn, Kings County Hospital Center, and Kingsbrook Jewish Hospital Center conducted full scale radiological decontamination exercises which incorporated people with physical disabilities. The exercises utilized the same set of drill participants; 17 total victims and 4 victims with physical disabilities that included 2 wheelchair bound nonmobile victims. The exercise required the HAZMAT teams to address in their decontamination plan the use of accessible equipment for nonmobile individuals. As a pilot study, we hypothesized that the hospitals would be unprepared to decontaminate special needs victims, especially the nonmobile victims based on guidelines published by the US Department of Health and Human Services. By conducting this exercise we found that the hospitals were unprepared to effectively decontaminate special needs victims. We also had a secondary finding that showed that the exercise failed to reach the primary goal also because of the artificiality of the drill. By utilizing healthy actors to assume the role of special needs victims, we found that many of the challenges of special needs victims were bypassed. We share the lessons learned in this drill in both the decontamination of special needs victims and how to prevent the short cuts that can occur in drills that simulate real life scenarios.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s114–s115  
doi:10.1017/S1049023X11003827

### (P1-51) Learning from a Cohort of Emergency Technicians & Doctors in Patient Assessment - A Survey in Secondary Hospital, Ningbo Area, China

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**Background:** Patient assessment (PA) is one of the key points to Emergency Technicians and Doctors (ETD) in Emergency cases. Objective of this study is to investigate the general level of PA skill in ETD in a secondary hospital Ningbo and how ETD practice in different scenarios during PA process.

**Methods:** A retrospective study was carried out by using a questionnaire .33 ETD which includes 3 Emergency Technicians and 30 Emergency Doctors (Male: Female = 2:1) were taken into the study. Thus the analysis of position dependent PA skill variation is difficult to carry out. Mean age of the subject was 28.2 years. Average working experience was 3.91 years.

**Analysis:** 12% ETD did not carryout scene size-up before approaching victims. The same proportion (12%) of ETD didn't call Police /Fire Agency in risk situations. 1/3 doctors insisted in entering the dangerous spot. Almost 30% doctors ignored bystanders safety when assessing patients. 10% doctors did not collect patient history during transferring. Only 30% of the

doctors practice complete physical examination, others (70%) were inclined to assess main parts. 84% of the ETD would not carry cervical collar when approaching the injured. During assessment, 69.9% ETD neglected patient's medical tag. 94.1% ETD accepted Emergency Training with only once or twice a year.

**Conclusion:** Awareness on safety of scene and self protection is weak in ETD in PA. Less doctors examine patient completely. Most of ETD does not look for medical tag which is considered an important element in PA although it is not prevailed yet in Ningbo. No significant differences are perceived upon the gender of the worker. Systematic education programs and ongoing trainings with identified shortcomings in patient assessment skill of ETD in Secondary hospitals in Ningbo area are highly recommended.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s115  
doi:10.1017/S1049023X11003839

### (P1-52) Educational Program of Disaster Preparedness in the Earthquake Prone Area, Mie, Japan

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**Background:** Major earthquakes with a magnitude of 7-8 are anticipated to occur in the next 30 years at a 60 percent chance on the southern coast of Mie, Japan. Since the most part of the Mie Prefecture, Japan, is likely to be damaged by tsunami and landslides, residents are expected to take self-reliant approach on the initial several days after the earthquake.

**Aim:** Developing disaster support system in including community based medical disaster preparedness in the region.

**Methods:** We have been providing knowledge and techniques to cope with the earthquake cooperated with experts of earthquake engineering. Basic and advanced life support educational programs for acute illness and trauma that may occur in earthquake and/or tsunami as well as during the evacuation and sheltering have been developed for public, local medical associations and the main hospital in the region. Moreover, we have started a new community continuous educational course to promote the public disaster preparedness. We teach introduction of emergency and disaster medicine to enhance knowledge of natural and social science on disaster preparedness.

**Results:** Local residents including public and medical personnel started to acquire a general idea of disaster and emergency medicine. The educational programs seemed to motivate local residents and healthcare professions.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s115  
doi:10.1017/S1049023X11003840

### (P1-53) Effectiveness of "Understanding Disasters" Training Among Health Care Professionals and Responders in China

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**Background:** Knowledge about disasters plays an essential role in managing and responding to disasters and emergencies, especially among a group of health care professionals who are actively or will potentially be involved in disaster and emergency settings. A set of training materials that aims to enhance

understanding of disasters and their impact of health has been developed. This project aims to examine the effectiveness of the disaster knowledge training to improve technical knowledge and perceptions of health impact of disasters in health care professionals and responders.

**Methods:** “Understanding Disasters” training was provided to 300 health care professionals during May to October. Each of the participated attendees filled a pre- and immediate post-training survey that contains socio-demographic information and 20 items measuring various knowledge of disasters.

**Results:** 287 individuals completed the questionnaires (95% response rate). Findings demonstrated that training may effectively enhance one’s knowledge about disasters, especially by clarifying the myths and misunderstandings towards disasters. Respondents demonstrated an enhancement of knowledge in 70% of the questions (14/20). Of note, while the whole sample exhibited an enhancement in knowledge, non-clinical staff appeared to have more statistical significant gained in knowledge than clinical based trainee.

**Implication:** Although disasters cannot be controlled, human impacts of disaster can be mitigated if appropriate training might be offer. This study demonstrates that training program might be useful to enhance better understanding of health impact of disasters.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s115–s116  
doi:10.1017/S1049023X11003852

#### (P1-54) Healthcare Worker’s Perception towards Individual and Institution Disaster Preparedness

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**Background and Aim:** Disaster and MCI events are occurrences that healthcare institutions must be prepared to respond to at all times. The events of September 11 2001 have rekindled our attention to this aspect of preparedness amongst our healthcare institutions. In Singapore, the SARS experience in 2003 and the recent H1N1 outbreak have thrust emergency preparedness further into the limelight. While priorities had been re-calibrated, we feel that we still lack far behind in our level of preparedness. This study is conducted to understand the perception of our healthcare workers towards their individual and the institution preparedness towards a disaster incident.

**Method:** A questionnaire survey was done for this study for the doctors, nurses and allied health workers in our hospital. Questions measuring perception of disaster preparedness for themselves, their colleagues and that of the institution were asked. This was done using a 5-point likert scale.

**Results:** The study was conducted over a 2-month period from 1st August 2010 till 30th September 2010. 1534 healthcare workers participated in the study. 75.3% felt that the institution is ready to respond to a disaster incident; but only 36.4% felt that they were ready. 12.6% had previous experience in disaster response. They were more likely to be ready to respond to future incidents ( $p = 0.00$ ). Factors that influenced perception of readiness included leadership ( $p = 0.00$ ), disaster drills ( $p = 0.02$ ), access to disaster plans ( $p = 0.04$ ), family support. 80.7% were willing to participate in future disaster incident response training. 74.5% felt that being able to respond to a disaster incident

constitute part of their professional competency. However, only 31% of the respondents agreed that disaster response training was readily available and only 27.8% knew where to go to look for these training opportunities.

**Conclusion:** There is an urgent need to train the healthcare workers to enhance their capability to respond to a disaster incident. While they have confidence in the institutions capability they were not sure of their own capability. Training opportunities should be made more accessible. We should also do more to harvest the family support that these worker value in order for them to be able to perform their roles in a disaster incident.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s116  
doi:10.1017/S1049023X11003864

#### (P1-55) Ten Commandments for Emergency Preparedness Deployment – A Basis for Quality Model

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Hospitals are obliged to maintain emergency preparedness plan to support the army’s rear. Hospital preparedness plans contain several scenarios that are aimed to provide an answer to different crisis situations. The basis of these scenarios is common to all situations. Haifa region three hospitals cooperation in emergency preparedness plans extracted Ten Commandments for utmost emergency deployment: a. Creating a clear management policy b. Assigning high proficiency qualified key persons. c. Creating a multidisciplinary management team: Physician, nurse and administrator, with the notion that there is only one manager. d. Emergency activities are similar as possible to routine level. e. Using an assignment method for f. Clear and elaborated checklists are the basis for emergency activities. g. Trainings and drills are a solid basis for knowledge. h. High materials and infrastructure availability and stocks. i. Accessible communication channels. j. Debriefing is the basis for organizational learning and quality improvement. These Ten Commandments are the milestones for a quality model, developed for emergency preparedness. The quality model outlines our constant quest to achieve a state of the art emergency preparedness system in a region that has been involved and is prone e to a variety of emergency scenarios. Ten Commandments for Emergency Preparedness Deployment – a Basis for Quality Model.

*Prehosp Disaster Med* 2011;26(Suppl. 1):s116  
doi:10.1017/S1049023X11003876

#### (P1-56) Recent Scientific Writing about Consequences of Disasters on the Health of Worker

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Recent Scientific Writings about Consequences of disasters on Workers Danielle Maltais, Ph.D. and Simon Gauthier, M.Sc. University of Quebec in Chicoutimi (UQAC) When an application of emergency measures is issued following a natural or technological disaster, or a disaster caused by human negligence, in many countries social workers and nurses play a central role in the support to the victims not only during the period of social disturbance but also at the time of the return to a normal life. These workers sometimes find themselves plunged within