and illnesses caused by disasters are preventable health risks. Though Disaster Management is the responsibility of every organization and institution, the Health Sector has a key role to play, as it is the lead sector. Hence, health personnel play a very important role in reducing disaster risks. This paper briefly examines the role and responsibilities of Medical and Health personnel and provides an overview of Emergency medical preparedness for reducing disaster risks. The concept of Disaster Medicine in dealing with the public health management of Disasters and Emergency Medical Preparedness, including the Prevention, Response, Relief and Rescue operations of Health Management while addressing various issues like casualty area management and Hospital Management etc through various strategies and actions will also be discussed. The Impact of Disasters on Health and how they can be best managed to reduce the number of mortalities and morbidities resulting from Disasters will be examined. The need for ensuring Community Participation in Health Management and prevention of health risk through Immunization and vaccination, proper food & nutrition, maintenance of hygienic and sanitation, adequate system of garbage disposal, Vector control and Research and Epidemiological studies will also be discussed. Prof. Bhaskara Rao, Mulam, Specialist, Policy, Planning and Related Issues, SAARC Disaster Management Centre (SDMC), New Delhi Prehosp Disaster Med 2011;26(Suppl. 1):s62-s63

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## (A231) Deficiencies in the Preparedness of Emergency Medical Services Providers for Terrorist Incidents Involving Children

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Introduction: Recent studies have discussed major deficiencies in the preparedness of emergency medical services (EMS) providers to effectively respond to disasters, terrorism and other public health emergencies. Lack of funding, lack of national uniformity of systems and oversight, and lack of necessary education and training have all been cited as reasons for the inadequate emergency medical preparedness in the United States.

Methods: A nationally representative sample of over 285,000 emergency medical technicians (EMTs) and Paramedics in the United States was surveyed to assess whether they had received training in pediatric considerations for blast and radiological incidents, as part of their initial provider education or in continuing medical education (CME) within the previous 24 months. Providers were also surveyed on their level of comfort in responding to and potentially treating pediatric victims of these events. Independent variables were entered into a multivariate model and those identified as statistically significant predictors of comfort were further analyzed.

Results: Very few variables in our model caused a statistically significant increase in comfort with events involving children in this sample. Pediatric considerations for blast or radiological events represented the lowest levels of comfort in all respondents. Greater than 70% of respondents reported no training as part of their initial provider education in considerations for pediatrics following blast events. Over 80% of respondents reported

no training in considerations for pediatrics following events associated with radiation or radioactivity. 88% of respondents stated they were not comfortable with responding to or treating pediatric victims of a radiological incident.

Conclusions: Out study validates our a priori hypothesis and several previous studies that suggest deficiencies in preparedness as they relate to special populations - specifically pediatrics. Increased education for EMS providers on the considerations of special populations during disasters and acts of terrorism, especially pediatrics, is essential in order to reduce pediatric-related morbidity and mortality following a disaster, act of terrorism or public health emergency.

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## (A232) Volcanic Eruptions: Health Consequences and Preventive Health Measures — An Overview A. Rossodivita

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The 2010 eruptions in Iceland, and on Mount Merapi in Indonesia, caused enormous disruption and opened a new chapter in the history of volcanic eruptions, emerging hazards, and disaster crisis management. A volcanic eruption can be devastating for the local wildlife as well as for the human population. Volcanic eruptions represent a different kind of hazard compared with floods, hurricanes, and earthquakes. Their onset also may be sudden, but they differ in that the danger does not necessarily decline rapidly with time, and actually may increase because of the unpredictability of the eruptive behavior and desire of a willing population to believe that the danger has passed and they can resume normal living. Volcanoes and their eruptions can result in a wide range of health impacts and kill people in a remarkably large number of ways. At least 500 million people worldwide live within potential exposure range of volcanic activity and possible eruption. The range of adverse health effects is quite broad and extensive. This presentation will provide an overview of the main causes of death and injury caused by a volcanic eruptions and the preventive health measures and public health interventions to be adopted during a volcanic eruption. Information on the causes of death and injury in eruptions is sparse, but the available literature is summarized in this report for the benefit of volcanologists and emergency planners. Healthcare workers and physicians responding to the volcanic events might find themselves involved in scenarios as varied as disaster planning, epidemiological surveillance, treating the injured, or advising on the health hazards associated with long range transport of volcanic emissions. Medical treatment only has a small role during severe volcanic eruptions. The preventive measures are paramount if injuries and loss of life are to be reduced.

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## (A233) Preparedness For A Mega Mass-Casualty Event (MMCE)

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A Mega Mass-Casualty Event (MMCE) is a unique and exceptional event, that results in a very large number of casualties