

### Improving Hospital Preparedness for Radiological Terrorism: Perspectives from Emergency Department Physicians and Nurses

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In any large-scale terrorist event involving radioactive materials, hospital emergency departments will play a pivotal role in providing care. In light of this, numerous efforts currently are in process to improve hospital preparedness. However, for such initiatives to be effective, there must be an understanding of the practical concerns, needs, and views of frontline hospital staff. This presentation will report findings from study of emergency department physicians' and nurses' perspectives on radiological terrorism issues. It was funded by the United States Centers for Disease Control and Prevention and performed in 2005 and 2006 in the Northeastern, Southern, and Western regions of the US involving a series of 10 focus groups. The issues examined were the: (1) the principal preparedness challenges for hospitals, emergency departments, and staff; (2) critical information needs and preferred information sources; (3) views of current training and future training needs; (4) views of current response plans and protocols; and (5) perspectives on potential difficulties and impediments that could affect readiness. Key findings from the study will be reviewed in this presentation, and the implications for hospital preparedness and response will be explored.

**Keywords:** hospitals; nurses; physicians; preparedness; radiological terrorism

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### Do Hospitals in Iran Have an Emergency Department Incident Command System for the Management of Hazardous Materials Victims?

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**Introduction:** After a disaster caused by industrial, terrorism, or natural events, victims exposed to hazardous materials may need to be admitted to an emergency department. Preparedness plays an important role in the appropriate management of these victims. Preventing the spread of contamination is a principal concern in the management of contaminated victims and requires a definite plan for all medical responses to hazmat incidents. This study provides preparedness guidelines for the management of Hazmat victims in hospital emergency departments.

**Methods:** This study was conducted in 2006. Select hospitals were surveyed to determine if they had a specific plan for medical response to hazmat victims. An expert team prepared an "Emergency Department Incident Command System (ICS) for the Medical Response to Hazmat Patients" as a preparedness plan for hospitals within the vicinity of industrialized areas.

**Results:** Responses to the survey indicated that none of the responding hospitals had specific plans for a medical response

to hazmat victims in the emergency department. The current standards of ICS were used to design a system for the selected hospitals. The current standards noted for the developed ICS included: (1) communication with related centers; (2) training modules; (3) personnel protection equipments; (4) procedures; and (5) prevention of contamination spreading.

**Conclusion:** Although hazardous materials often are used in industrialized areas and hazmat incidents may lead to morbidities and contamination, general hospitals are insufficiently prepared for the management of contaminated victims. An Incident Command System designed to manage contaminated victims can be used as a model for other hospitals in Iran.

**Keywords:** hazardous material; hazmat incidents; Incident Command System; Iran; preparedness

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### Session 2: Safe Hospitals 2

Chairs: TBA

#### Assessment of Disaster Preparedness and the Feasibility of Prehospital Care in a Rural Guatemala Clinic

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**Introduction:** As a developing nation in Central America, Guatemala is vulnerable to certain naturally-occurring hazards. In October 2005, Hurricane Stan destroyed large areas of rural San Marcos, Guatemala. While Guatemala City is becoming highly urbanized, a majority of the people still live in rural areas with limited access to health care. Rural clinics provide access to primary healthcare services for people who are unable to travel to large cities that often are >2 hours distant. After an event like Hurricane Stan, a rural clinic could serve a vital role in the relief efforts, however, it rapidly could become overwhelmed with people needing medical assistance. Disaster preparedness and the capabilities of a rural clinic in San Marcos in the event of a disaster were assessed.

**Methods:** Data were obtained using a convenience sample of clinic patients. Data collected included demographics, needs of the community, existing resources, barriers inhibiting residents from accessing these resources or services, and community awareness. A focus group discussion with clinic staff and community health promoters/leaders was conducted to determine the major successes and obstacles facing the community and clinic during and after the hurricane. A survey was administered to assess available resources and infrastructure.

**Conclusions:** Prehospital care is difficult without the necessary resources, infrastructure, or governmental support. However, certain actions can be taken to better prepare for disasters. Strategies that could improve the clinics preparedness will be discussed, and a list of needs and priorities of a small rural medical facility that could be used as a guide for planning will be generated.

**Keywords:** disaster; Guatemala; prehospital; preparedness; rural

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