

<25% of FLHPs in their country could discriminate between a man-made versus a natural incident involving CBRN agents. Sixty percent of the responding experts (38) believe that FLHPs in their country are better trained for natural incidents.

All responding experts report that they are aware of an operational plan to manage CBRN incidents in their country, and experts from 10 MS report that they are aware of such preparedness plans at all administrative levels (national/federal, regional and local).

When comparing the answers received from the two questionnaires, the experts tend to underestimate the proportion of FLHPs in their country who are able to deal with a chemical, biological, or radiological incident. At the same time they are aware of the fact that FLHPs do not have knowledge of the existing plans in their country and administrative level.

**Keywords:** biological; chemical; knowledge; nuclear; preparedness; public health; rapid response; threats; training

*Prehosp Disast Med* 2007;22(2):s135–s136

### (232) Epidemiology: The Essential Tool of Disaster Risk Management in the Health Sector

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**Introduction:** This article introduces the national and international evidences of the application of epidemiology, as an essential tool of health risk management in disasters.

**Needs of Disaster Risk Reduction Information:** Regarding ISDR, a disaster is a function of the risk process. The success of an integrated disaster risk reduction (DRR) approach implementing the fields of actions depends on the accurate information on hazards, vulnerability and capacity.

**Applications of Epidemiology in DRR:** Epidemiological researches can provide needed information in health sector, both population and system-based, on risk awareness and assessment, hazard analysis and vulnerability/capacity analysis, knowledge development; public commitment and actions, partnership, networking and early warning systems.

**Disaster Epidemiology:** As a developing branch of health science, disaster epidemiology needs more theoretical work and standardization of methods and tools. Translating the results of epidemiologic research into practice is the integral part of the disaster epidemiologists' efforts in the future. Based on lesson learned from Bam earthquake, Iran 2003, Health Emergency & Disaster Department (HE&DD) has been established as the first academic department in Eastern Mediterranean Region (EMR) focusing on DRR in health system.

**Conclusions:** In the context of disasters, epidemiology goes beyond the issues of diseases alone; it not only covers all aspects of health outcomes in humans, but also the process of disaster risk management. Regarding effective decision making in disasters, training and application of Disaster Epidemiology should be integrated into disaster risk management of health sector.

**Keywords:** epidemiology; information system; risk reduction; disaster

*Prehosp Disast Med* 2007;22(2):s136

### (233) International Athens Airport (IAA) and the Use of Automated External Defibrillation (AEDs) by the Workers

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**Introduction:** The use of automated external defibrillators (AED) is a new link in the chain of survival for victims of out-of-hospital cardiac arrest. With basic life support, AED can be used by individuals other than medical officers. Early defibrillation can and should be performed by specially trained bystanders.

**Case Report:** A 55-year-old man presented with sudden cardiac arrest in the International Athens Airport (IAA). Basic life support was performed by trained bystanders and IAA personnel. Defibrillation was delivered using an AED <5 minutes from the arrest with successful conversion to spontaneous circulation. The patient then was cared for by the Emergency Physicians of the IAA Medical Service six minutes after the first call, and admitted to a cardiology intensive care unit. An AMI was treated by angiography-angioplasty. The patients' outcome was favorable, as the patient was discharged 11 days after the occurrence of the cardiac arrest. Three other similar cases occurred with favorable outcome.

**Conclusions:** The time interval before the delivery of the first shock clearly is a determinant for survival after pre-hospital cardiac arrest. Use of an automated external defibrillator by individuals other than physicians, can contribute to an earlier defibrillation.

**Keywords:** airport; automated external defibrillation; defibrillation; Greece

*Prehosp Disast Med* 2007;22(2):s136

### (234) Clinical Profile of Patients Presenting with Dengue Fever in an Emergency Department at an Urban, Tertiary-Care Hospital during the Outbreak in 2005

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**Objective:** To study the clinical profile of patients with dengue fever (DF) presenting to the emergency ward of an urban, tertiary-care hospital during the outbreak in 2005.

**Methods:** The study was conducted in the Emergency Department at the All India Institute of Medical Sciences, New Delhi from August to October 2005. All patients testing positive for IgM and/or IgG antibodies were included.

**Results:** Of the 119 cases included, DF was diagnosed in 58 (48.7%), DHF in 53 (44.5%), and DSS in 8 (6.75%) cases. The predominant presentations were fever (100%), rash (24.3%), abdominal pain (16.8%), seizures (1.6%), and retroorbital pain (0.8%). Bleeding manifestations were observed in 56 (47%) cases. Petichiae (13%), hemetemesis (10.9%), gum bleeding (10.1%), subconjunctival hemor-