

ment programs. Standard No. 1600 will become effective in the spring of 2000. The committee in charge of developing this standard is comprised of 25 experts, including representatives from the Federal Emergency Management Agency (FEMA), the International Association of the Fire Chiefs (IAFC), the American Insurance Services Group, and the National Coordinating Council on Emergency Management (NCCEM). The committee has composed a comprehensive paper to build "disaster resistant communities". The paper addresses the process of hazard analysis, risk assessment, as well as public and leadership awareness and leads to emergency activities. The disaster activities are described in four related phases: 1) Mitigation; 2) Preparedness; 3) Response; and 4) Recovery. This presentation will outline these phases as well as the planning process for both the public and private sector.

The disaster planning process should include as many entities as possible (public, private, business, first responders, neighborhood groups, churches, charitable and non-profit organizations, and other specialists). In order to be prepared, it is crucial that every person and organization know their respective role(s) and responsibility(ies) in advance. All parties must be trained on a regular basis (drills, table-top scenarios, full-scale exercises) and allowed to make suggestions on how to refine the current plan.

Using the example of the 1994 Northridge Earthquake, this presentation will demonstrate how the Californian Comprehensive Emergency Management (CEM) worked. It will display how Mitigation, Preparedness, Response, and Recovery activities were addressed before, during, and after the impact.

The most common management tool used in the USA for emergency situations is the Incident Command System (ICS). This presentation will explain the principles and structures of the ICS including unified command and span of control. Different agencies (law enforcement, emergency medical services (EMS), fire, hospitals, military, public works) and jurisdictions (Federal, State, Local) were able to communicate, coordinate, and cooperate their resources using the ICS in the earthquake event.

The objective of all disaster efforts is to reduce the occurrence and/or the impact of catastrophic situations on life, environment, and property.

Keywords: disaster, management of; earthquakes; exercises; incident command system (ICS); mitigation; National Fire Protection Association (NFPA); Northridge Earthquake; planning; preparation; recovery; response

V-3

Automatic Advisory Defibrillator

Jean Marie Fonrouge, MD, LLD

University Hospital Edouard Herriot, Lyon, France

Circulatory arrest due to ventricular fibrillation causes 40 to 50 thousand sudden deaths each year in France: that is, 1 person in every 1,000. Such fibrillation occurs in 85% of non-traumatic, unexpected, circulatory arrest outside of hospitals.

When faced with this type of distress, emergency teams must begin cardiopulmonary resuscitation with

the well-accepted procedures of the chain of survival. When the victim is inanimate and does not react, the first team member on the scene must systematically make an initial assessment and raise the alarm. When the most experienced team member arrives, s/he must check to confirm that the victim is in a coma, that s/he is not ventilating, and that there is no carotid pulse.

Two emergency gestures then are performed simultaneously:

- 1) Cardiopulmonary resuscitation is begun by controlling the free passage of the upper airways, setting up efficient artificial ventilation, and exerting thoracic pressure;
- 2) The other workers prepare the automatic advisory defibrillator. The two electrodes that are pre-connected to the device are applied according to the possible access to the thorax. The pads are applied either to the upper part of the right hemithorax and the lower part of the left hemithorax. If the message is that a shock is required, priming the charge for defibrillation takes 9 to 15 seconds to trigger according to the power level chosen... button is activated. It then becomes possible to press this button to deliver a shock. Once the shock has been administered, the device performs another analysis.

In favourable cases, the victim recovers consciousness with normal spontaneous ventilation and efficient circulation. It then is preferable to continue oxygenation using a high-concentration oxygen by mask and to place the patient in the recovery position. But, be careful, because another episode of ventricular fibrillation may occur at any moment!

This is why the presence of the Mobile Intensive Care Unit is mandatory since the victim can be managed properly on site and on the way to hospital. Therefore, by placing this equipment in emergency vehicles involved in prehospital settings, for example, emergency services, intensive care, and cardiology units. The time taken to diagnose and treat a large number of episodes of ventricular fibrillation should be reduced. In this way, the presence of automatic defibrillators should lead to saving a considerable number of patients with unexpected ventricular fibrillation, and help them to achieve a much improved cerebral and functional outcome.

Keywords: automatic advisory defibrillator; cardiopulmonary resuscitation (CPR); training; ventricular fibrillation

General Session (11)

International Repatriation

Tuesday, 11 May, 9:00-10:00

Chair: Linda M. Dann, Masahiro Takiguchi

G-54

Emergency Medical Evacuation Program for Expatriates in Russia

Dr. Tom Löfstedt, MD; Mr. Juhani Missonen

Euro-Flite Air Ambulance, Helsinki, Finland

In the late 1980s, the Emergency Medical Assistance Group, Ltd. (EMA) together with the air ambulance