

Mass Medical Repatriation of Wounded Civilians in an International Terrorist Attack—Lessons Learned from the Tabba/Ras el Satan, Egypt Experience on 07 October 2004

Y. Bar-Dayan,¹ A. Leiba,² M. Peres,² G. Weiss,²
G. Horwits,² A. Horwits,²

1. Surgeon General, Israeli Defense Force (IDF) Home Front Command, Israel
2. Israel

Introduction: Large-scale, international, terrorist attacks recently have become common-place. The need for medical repatriation of all or some of the wounded civilians could arise in such instances. On 07 October 2004, two suicide bombers crashed a car into a hotel in Taba, Egypt, and another suicide bomber in Ras el Satan in Nueba, Egypt. The Israeli Defense Force (IDF), via the Home Front Command Forces took the responsibility for the salvage, rescue, and repatriation mission. The mission requested the collaboration of the Egyptian rescue teams, the search and rescue teams of the Home Front Command, the IDF medical corps forces, the Israeli Air Force rescue teams, the Magen David Adom ambulance services, and the civilian hospitals.

Objectives: To outline the distinctive aspects of this mission, as well as to share experiences and lessons learned.

Methods: Israeli Army and Israeli National Emergency Medical Services debriefing reports were used to study the composition of the crews, distribution of injuries, mode of operation, and mission schedule.

Results: Optimal international crisis collaboration was established immediately between Israel and Egypt. Borders were opened and an efficient working collaboration began.

A total of 185 wounded Israelis were repatriated: four were severely wounded, 13 were moderately injured, and 168 were mildly injured. Thirty-two people died. A total of 168 injured people arrived at the Yoseftal hospital either by ambulances or private cars, a small hospital in the town of Eilat on the border. The hospital's emergency room was ready to receive massive numbers of-casualties (MCI) in 22 minutes. The first casualty arrived 32 minutes after the attack, and the last arrived nearly 14.5 hours after the attack. A forward team, including 23 doctors, 35 paramedics, 12 nurses, and senior IDF medical personnel with 150 units of blood were transported by the Israeli Air Force to Eilat to assist in the search and rescue operation in the field and in the local hospital. Twenty additional physicians on vacation in Eilat rapidly arrived at the hospital. Yoseftal Hospital rearranged itself as a "triage hospital" dealing with triage, life-saving treatment, life-saving surgery, and evacuation. Secondary transfer was done by ambulances and helicopters to three trauma centers in Israel, with the closest being a two-hour drive from Eilat.

Conclusions: This mode of operation provided optimal treatment to the wounded people. The principles of this operation are applicable to other cross-border, international terrorist attacks. Optimal international collaboration is critical for the success of this rescue mission. Both the attacked country and the neighboring country must con-

centrate their responding forces as soon as possible. Rapid triage and evacuation, as well as the search and rescue for wounded persons in the crash area, should be done by the combined forces according to the operational advantage of each side. The small hospital near the border should receive most of the casualties and act as a "triage hospital". Medical personnel from the emergency medical services and Israel were used to reinforce the triage hospital.

Keywords: collaboration; Egypt; hospital; international; Israel; search and rescue; terrorism; treatment; triage

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Improving Risk Communication in Radiological Terrorism Events: Findings from a Multi-Year Research Study

S.M. Becker

University of Alabama at Birmingham, USA

Preparing for the possibility of terrorism involving radioactive materials is now a high-priority focus for emergency response and disaster management agencies around the world. A key component of these efforts involves the development of effective risk communication strategies. This presentation reports findings from a multi-year, multi-site study of risk communication and information issues in radiological terrorism situations that is being funded by the United States (US) Centers for Disease Control and Prevention (CDC) and carried out by four major US universities. The study involved an extensive set of focus groups as well as cognitive response interviews with a range of population segments in the US. The three-fold aim of the research is to: (1) better understand people's views, reactions, and concerns related to a radiological terrorism event; (2) identify people's specific information needs and preferred information sources; (3) pretest draft television, radio and printed informational materials; and (4) gain specific insights into ways of improving emergency messages for radiological terrorism situations. In this presentation, major findings from the first two years of the project are reviewed, and the implications of the research for developing messages in radiological/nuclear terrorism situations are explored.

Keywords: assessment; communication; radiological/nuclear; risk; terrorism

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Demystifying Bioterrorism: Misinformation and Misperceptions

M. Hopmeier,¹ E. Noji,² T. Goodwin,³ S. Lillibridge⁴

1. Unconventional Concepts, Inc., USA
2. CDC, Bioterrorism Preparedness Program, USA
3. Unconventional Concepts, Inc, USA
4. University of Texas, School of Public Health, USA

The true threat of bioterrorism remains mysterious and elusive to the common citizen. It principally has become the dominion of a few "experts", many of whom apparently have limited expertise, have failed to communicate to society the risks and realities effectively, and instead have created an air of uncertainty surrounding the topic.

Uncertainty about how an individual can prepare for and respond to an event and what steps the government is taking to protect them can leave the public confused and anxious. However, with education, the public can learn what is true and what is erroneous about bioterrorism.

The authors will address many of the “common knowledge” aspects of bioterrorism and attempt to dispel many of the “facts” so widely accepted throughout society by both professionals and laymen alike. Coupled with this will be a discussion of some of the key aspects of crisis communication and preparation that can help reduce or eliminate much of the confusion attendant to a bio-terror incident. The following eight “myths” will be discussed: (1) we can accurately predict and detect bioterrorist attacks; (2) bioterrorism will be preceded by a warning; (3) bioterrorism preparedness essentially is identical to planning for chemical, radiological, or nuclear attacks; (4) we will be able to rapidly determine whether an epidemic is natural or the result of bioterrorism; (5) nothing can be done to prepare the civilian population for a bioterrorist attack; (6) effective preparedness for a bioterrorism attack can be achieved without major investments in basic bio-scientific research; (7) hospitals can treat a large influx of patients following a bioterrorist attack; and (8) bioterrorism preparedness and response is a national responsibility.

Keywords: auto-immune deficiency syndrome (AIDS); bioterrorism; misinformation; misperception; preparedness; severe acute respiratory syndrome (SARS)

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Lessons Learned from Terrorism-Related Injuries in Israeli Civilians

K. Peleg; L. Aharonson-Daniel

Israel National Center for Trauma and Emergency Medicine Research, Israel

Introduction: Terror-related injuries have become a threat for people all over the world. In Israel, from October 2000 to December 2003, 6,049 people were injured, and 904 were killed by terrorist attacks. Many lessons have been learned from the necessity to deal with such a large number of frequent mass-casualty events. This presentation aims to share the Israeli experience with other nations that may face the risk of terrorism.

Methods: An analysis of national trauma registry data from October 2000–December 2003 was performed.

Results: Lessons learned will be described and practical information on enhancing preparedness for treating casualties from acts of terrorism will be provided. Lessons include: (1) arrival and hospitalization patterns—do the most severe injuries arrive first?; (2) triage—has triage changed due to new mechanisms of penetrating injuries such as shrapnel nails and bolts included in explosives?; and (3) differences in resource consumption by terrorism-related casualties.

Conclusion: The audience should better appreciate the various aspects of handling of mass-casualty events, identify factors that contribute to the severity and outcome of terrorism-related injuries, know what can be expected under specific attack types, and learn some of the most important implications for preparedness for such situations.

Keywords: characteristics; injuries; Israel; management; mass-casualty events; preparedness; terrorism

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Keynote 3: CBRN/HAZMAT

Chair: Per Kulling

Director, Department of Emergency and Disaster Planning, National Board of Health and Welfare, Sweden

Keynote 4: Children and Terrorism: The Dagestan, Nord-Ost, and Beslan Experiences

Chair: Leonid Roshal

Children's Clinical and Research Institute of Emergency Surgery and Trauma, Moscow

Friday 20th May 2005

Non-Governmental Organizations and the WADDEM

Chair: Knut Ole Sundnes

Plenary 3: The Politics of Disaster Relief

Medical Capacity of Disaster First Responders in Turkey

G. Ozel; S. Yaylaci; E. Noji

Nationally Registered Emergency Medical Technician-Paramedic (NREMT-P), USA

Objective: The aim of the present review was to assess the current medical capability of disaster first-response units such as Civil Defense Units and National Medical Response teams in Turkey and to make recommendations for a model of structure and training of such teams.

Needs Assessment: The Marmara Earthquake in 1999 and several other major disasters since then made it clear that Turkey lacks the availability of well-trained, medical, first-responder teams to perform medical care while working closely with search and rescue (SAR) units during the initial response to disasters.

Current Situation: Turkish Civil Defense Units are the primary sources to respond to disasters and perform SAR operations. While these units' main focus is SAR, they lack the capacity to provide medical care beyond basic life support to other unit members and disaster victims. The Ministry of Health recently has approved a model program to form and train medical response units to operate during disasters. The National Medical Response Teams (UMKE in Turkish) are based on volunteer membership from doctors and other allied health practitioners. However, there seems to be no screening process for appropriateness of team members to specified tasks. The 40-hour curriculum currently taught to UMKE members covers only principles of disaster medical response and is not inclusive enough to address disasters other than earthquakes. This curriculum does not address such critical topics as hazardous materials/weapons of mass destructions concepts, decontamination