

## Injuries from Landmines and Unexploded Ordnance in Afghanistan

Oleg O. Bilukha, M. Brennan, B. Woodruff

**Background:** Afghanistan is among the countries worldwide most affected by landmines and unexploded ordnance (UXO). Landmines/UXO injure or kill at least 1,200 Afghans each year, and may undermine post-conflict recovery. In 2002, approximately two million returning refugees were at high risk for injury because they were unaware of dangerous areas.

**Methods:** Surveillance data were obtained from the International Committee of the Red Cross clinic-based surveillance for landmine/UXO injuries in 390 health clinics and hospitals in Afghanistan from March 2001 to June 2003. Surveillance data were used to describe victim demographics, risk behaviors, circumstances, and explosive types related to landmine/UXO incidents.

**Results:** During this time period, 81.2% of 1,637 landmine victims were civilians, and 51.4% were under 18 years of age. Ten times more injuries occurred among males than among females, and children aged 10–14 years were at highest risk. Children under 18 years of age were 2.4 times more likely than adults to be injured by UXO rather than by landmines (95% Confidence Interval = 2.1–2.8). The most prominent risk behaviors for children and adolescents were playing and tending animals; for adults, military activity. The case-fatality ratio of 9.4% probably is underestimated because surveillance predominantly detects victims who survive long enough to receive medical care.

**Conclusions:** Mine risk education (MRE) should specifically target males and adolescents, because these groups are at the highest risk. In addition, MRE should focus on UXO hazards to children and adolescents, and on landmine hazards to adults and should address age-specific risk behaviors. Expanding community-based reporting will improve sensitivity and the representation of surveillance.

**Keywords:** adult; Afghanistan; behaviors; case:fatality ratio; children; injuries; landmines; mine-risk education; Red Cross; refugees; risk; surveillance; unexploded ordnance

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### Medical Relief During the Gujarat Earthquake in India

M.K.F. Leong; J.L.L. Yap; S.H. Ang; V. Anantharaman  
Singapore

On 26 January 2001, an earthquake with a destructive force of 7.9 on the Richter scale struck near the city of Bhuj, in the state of Gujarat in India. This catastrophe was reported to have affected 350 million people, injured 100,000, and killed 10,000. The Singapore International Foundation in collaboration with SingHealth Group and the Ministry of Environment, sent a medical relief mission, which was

coordinated in partnership with the Indian Medical Association, Rajkot to Bhuj. The team of six doctors, five nurses, a public health official, and an emergency behavioral officer, along with 1.8 metric tons of medical equipment and supplies, was deployed in the city of Bhuj to provide medical relief. The work included emergency medical care, critical and intensive care, critical care transport, primary health care, public-health assessments, and interventions. We discuss lessons learned in mission planning, preparation, evaluation and needs assessment, emergency behavior and response, and integration with other NGOs.

**Keywords:** Bhuj; critical care; earthquake; emergency; evaluation; Gujarat; primary care; Rajkot; relief; Singapore; team; transport  
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### Regional Command and Control of the Health Emergency Services in the Western Part of Sweden

Anne-Lii Kivi, RN; Annika Hedelin, RN; Per Örtengren, MD, PhD

Centre for Prehospital and Disaster Medicine, Gothenburg, Sweden

The western part of Sweden (Västra Götalandsregionen, population 1.6 million) has experienced a number of major incidents during the last 15 years. As a result, we have formalized the rapid establishment of a regional command post in order to coordinate the medical support activities from prehospital and in-hospital healthcare providers.

A physician and a nurse with special training in disaster management are constantly on call. The ambulance dispatch center has been instructed to alert these persons by pager as soon as three or more ambulances are dispatched to a single incident. Information regarding the specific incident is fed from the command and control vehicle to the physician and/or nurse, who have been given the mandate to activate and coordinate all emergency medical facilities in this part of Sweden. This is done from a command post equipped with maps, phones, faxes, computers, and radios immediately adjacent to the ambulance dispatch center. The physician will act as the "gold" commander and the nurse as chief of staff, as more people are called in to carry out the eight different functions of the staff.

Most incidents can be handled by phone. However, the command post has been in full operation twice each year since it was established in 1999. The result has been faster activation of the different healthcare providers and more efficient cooperation.

**Keywords:** command post; disaster management; regional command; Sweden  
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### Medical Management in Major Incidents

Anders Rüter, MD; Leif Gustafsson, Amb. Techn; Thore Wikström MD, PhD

Centre for Teaching and Research in Disaster Medicine, University Hospital, Linköping, Sweden

The Swedish National Board of Health and Welfare has developed and introduced the management system, SWEDE. This system, which now is being implemented in several counties in Sweden, consists of a doctrine part and a web-based information system IS SWEDE. The doctrine describes using a functional approach including