

obtained from 178 trainees revealed higher satisfaction of the DIMA in transparencies (92 ±10 points vs. 66 ±12 points, *p* <0.001) and accountability (93 ±8 points vs. 78 ±16 points; *p* <0.01) compared to the conventional methods. In phase 2, the error rate of information was about 2.4% (donor = 0.6%; consignment = 0.5%; warehouses = 0.8%; and central feedback 0.5%), which was significantly lower than that of information by conventional logistics systems (8%, *p* <0.01). **Conclusions:** The DIMA system is a transparent and efficient humanitarian management system. More practice may reduce the error rate in the future.

**Keywords:** disaster health management; logistics systems; hospitals; Humanitarian Supply Management System (SUMA); training  
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**Deploying an International Telemedicine System in a Major Active Earthquake Zone**

Peter F. Hu,<sup>1,2,3</sup> John Spearman,<sup>4</sup> Yan Xiao,<sup>1,2,3</sup> Yan Kan,<sup>5</sup> Jin Liu,<sup>5</sup> Jing P. Wu,<sup>5</sup> Steven Seebode,<sup>3,6</sup> David Gagliano,<sup>7</sup> Thomas Scalea,<sup>1,3</sup> The International Group<sup>3,5,7</sup>

1. Program in Trauma, University of Maryland School of Medicine, Baltimore, Maryland USA
2. Department of Anesthesiology, University of Maryland School of Medicine, Baltimore, Maryland USA
3. Center for Trauma and Anesthesiology Research, University of Maryland School of Medicine, Baltimore, Maryland USA
4. R Adams Cowley Shock Trauma Center, Baltimore, Maryland USA
5. West China Hospital, Chengdu, China
6. University of Maryland Medical School, Program in Trauma, Baltimore, Maryland USA
7. Cisco System Inc, Herndon, Virginia USA

**Introduction:** Within three weeks of the major earthquakes in China on 12 May 2008, a medical team from a major US trauma center arrived at a major regional hospital located 50 miles from the epicenter, well within the active earthquake zone. The hospital had 140 intensive care unit (ICU) beds dedicated to earthquake victims, most of which sustained crush injuries. An international telemedicine link was requested for teleconsultation between the US trauma center and the Chinese regional hospital.

**Methods:** Several telemedicine systems were rapidly assessed for availability, accessibility and reliability. The telemedicine equipment and software also were selected based on ease-of-use, ease-of-setup, and feasibility for rapid deployment. The resulting system was tested for connection speed and proximity to the ICU in three locations inside the hospital. The tests covered settings for video frame rate, audio quality, image quality, and reliability.

**Results:** The international telemedicine system was operational within 48 hours. Sixteen people (10 located in China and six in the US; nine physicians, three nurses and four administrative leaders) attended the telemedicine session that lasted 45 minutes. The topics included the role of international medical relief team in the ICU for earthquake victims, and patterns and selected cases consultation. The

system greatly enhanced the role of international relief effort by sharing medical expertise across the globe.

**Discussion:** In general, international medical relief is limited by duration (time) and personnel. A rapidly deployable telemedicine system may provide a critical link between the disaster sites and remote medical expert resources both locally and internationally.

**Keywords:** China; earthquake; intensive care unit; international; telemedicine; trauma  
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**The Mumbai Terrorist Attacks on 26 November 2008: Another Proxy War?**

Kaushik Chatterjee,<sup>1</sup> Harry Ralte,<sup>2</sup> Ravindra Jammihal,<sup>2</sup> D. Jeyaprakash,<sup>2</sup> Volga More,<sup>1</sup> Nobhojit Roy<sup>2,3</sup>

1. Centre for Studies in Ethics and Rights, Mumbai, India;
2. Center for Studies in Ethics and Rights (CSER), Mumbai, India
3. BARC Hospital, Mumbai, India

**Introduction:** Mumbai is India’s largest city and the financial capital of the country. Destruction of symbolic structures in large cities has been a worldwide strategy of terrorists for spreading hopelessness, fear, and panic. The recent Mumbai terror attacks were similar and included taking foreign nationals as hostages.

**Methods:** Victims profiles were studied for mode of injury (firearm, fire, blast, fall, or combination), the type of injury, and treatment. The level of hospital preparedness was described, especially for surge capacity. Terrorist events and conflict over the last five decades in Mumbai and India were analyzed. The Indian data was compared to global terrorism in order to suggest appropriate recommendations for countering terrorism in a developing country.

**Results:** At least 173 people were killed and 308 were injured in the recent attacks. There were eight attack sites in downtown Mumbai, of which, three sites were patronized largely by western tourists and foreign delegates. Three were crowded public places, including a hospital. The most prevalent injuries were bullet wounds from automatic weapons, followed by blast, shrapnel, falls, and burns. All previous terrorist events in Mumbai are listed in the Table.

Date	Type of Event	Killed	Comments
12 Mar 1993	Serial bombing	257	13 serial bombs in public places
06 Dec 2002	Bus bomb	2	Single bomb in suburb
27 Jan 2003	Bicycle bomb	1	Suburb
14 Mar 2003	Train bomb	10	Single bomb in suburb
28 July 2003	Bus bomb	4	Single bomb in suburb
25 Aug 2003	Car bomb	50	2 crowded public places
11 July 2006	Peak-hour train bombs	209	7 serial explosions

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