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## **Keynote Addresses**

Globalization of Emergency Response to Humanitarian Crises

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The first year of the new millennium opened with severe earthquakes in India and El Salvador, and closed with the conflict in Afghanistan, which was triggered by terrorist attacks in New York and elsewhere. All of these incidents have involved major humanitarian concerns, and the question of how the international community should respond has given rise to a variety of issues.

Given that humanitarian concerns have no national boundaries, there is no disputing the fact that, for large-scale humanitarian crises, global responses are needed. With regard to war, the ultimate form of humanitarian crisis, the 1949 Geneva Conventions are in place. Today, the Geneva Conventions may be described as the "international humanitarian law (IHL)". Having passed through several revisions, it has become extremely precise, and provides an extensive framework of basic humanitarian rules that should be observed in wartime. In particular, laws regarding human rights, developed since the Second World War, are amply reflected in the Geneva Conventions. Moreover, in the sense that all nations have signed the Geneva Conventions, indeed, it may be described as a global standard during time of war.

The New York terrorist attacks on 11 September posed many new questions regarding the practicality of humanitarian global standards, in the contexts of a nebulous, international terrorist organization, which indiscriminately killed and injured people of many nationalities in the US; apprehensions regarding a "clash of civilizations;" the use of cutting-edge technology and weaponry in Afghanistan, a country where many aspects of previous errors remain; and the development of the conflict into a war in the name of imposing global justice. From the viewpoint of rescue efforts in New York, new issues arose in quick succession. Several thousand people were caught up in the incident in a narrow space in a single instant, and the fact that not only rescue, but also recovery of bodies, post-mortem procedures, and identification of victims could not take place smoothly, made the incident particularly shocking. Not only those directly affected, but also many who saw the images on television were psychologically affected, or there was concern that they might be affected. Severe post-traumatic stress disorder (PTSD) occurred among firefighters, police officers, and others involved in the rescue effort.

Among the other concerns were appropriate methods of handling foreign nationals and illegal immigrants among the victims, providing information on missing persons, and responding to "opportunistic" crimes such as the anthrax incidents. In addition, new terrorist attacks involving poison gas or chemical weapons, or attacks targeting nuclear facilities and the like, arose as real possibilities for which responses had to be considered.

In the case of natural disasters and the like, many players among both developed and developing countries recently have participated in relief efforts, and coordination of such activities is becoming increasingly difficult. In the first place, there are issues regarding the ethics of relief efforts. Relief from a humanitarian standpoint, should be distributed equitably. However, the motives of the various organizations involved differ, and as long as there are qualitative and quantitative differences in the sympathies of those who support such organizations, it is not easy to ensure that relief is equitable. Secondly, regarding the nature of relief activities, from the viewpoints of cost-effectiveness, efficiency, and ensuring basic human rights, a consistent global standard is needed. In the presence of such a standard, integrated coordination of relief activities becomes possible for the first time. Accordingly, the International Red Cross, in cooperation with related organizations, in a process beginning with adoption of the ten-article "Activity Criteria for International Red Cross and Red Crescent Movement and Organizations Engaged in Disaster Relief" in 1994, drew up the final version of the Humanitarian Charter and Minimum Standards for International Aid in 1999. These standards are reviewed regularly with reference to experience, and are positioned, so to speak, as a "starting point". Already, many international relief organizations and nongovernmental organizations (NGOs) have expressed their approval of these standards.

In time of conflict, certain humanitarian rules are stipulated by the Geneva Conventions, and the way is being opened to humanitarian intervention through international conventions and United Nations Security Council resolutions regarding relief for refugees and internally displaced persons. However, in the event of natural disasters, regarding the issues of how the government of the affected country should respond to offers of aid from the international community, and how governments on the supporting side - as well as industries involved in international communications and transportation - can contribute to relief efforts, there still are no blanket arrangements internationally. Accordingly, a movement to create an international convention, the International Disaster Response Law, is under way among international humanitarian relief organizations including the International Red Cross.

Finally, even if an international system for relief is developed, the efficiency of relief increases, and the nature of relief activities is enhanced, unless the victims of conflicts and disasters that do not arouse international concern also are favored by such efforts, the ideal of equitable humanitarianism cannot be attained. The international community is not sufficiently mature to guarantee basic human rights to all of the citizens of the world. As long as relief efforts merely are expressions of humanitarian chau-

vinism, there is little hope that the causes of disasters will be addressed, and it is likely that, no matter what technical progress is made, relief activities will remain stopgap efforts that treat the only symptoms.

Keywords: coordination; Geneva Conventions; human rights; humanitarianism; international disaster response law; international humanitarian law; International Red Cross; post-traumatic stress disorder (PTSD); relief; standards; terrorism

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## Disaster Management Evaluation: The Current Status of the Standardised Protocol in the Utstein Style

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Introduction: For decades, disasters and events that result in multiple casualties have provoked humanitarian responses to assist the affected population regardless of whether they were caused by deliberate, man-made or natural events. However, the statements of the UN Secretary General in 1971,<sup>1</sup> the US Council on Foreign Affairs in 1987,1 and conclusions reached following the hurricanes George and Mitch of the Pan-American Health Organisations (PAHO)<sup>2</sup> differ little with regard to the overall criticism of how international disaster management functions. Lack of such improvement can be attributed to the absence of formalized and appropriate research methods.

Purpose: The Guidelines and Templates presented in this document propose a structural framework to be used to appropriately design, conduct, and report findings of evaluation and research in Medical and Public Health aspects associated with disasters. Studies performed using this structure will provide the ability to compare and integrate the findings of the evaluations and research of different disasters with the end-point to attenuate or eliminate disasters. This could result from the elimination or reduction of hazards, decreasing the risks for the actuation of the hazard, augmenting the absorbing capacity of the society and environment at risk to prevent the hazard from becoming a destructive event, and enhancing the efficiency, effectiveness, and cost:benefit of preparedness and responses to disasters.

The Guidelines: This report is the result of extensive research and discussions by a Steering Committee over a course of seven years, and by invited participants in two International Workshop (Gothenburg, Sweden, 1997 and Lyon, France, 2001). The process was endorsed by the General Assembly of the World Association for Disaster and Emergency Medicine (WADEM) in Osaka in 1999.<sup>3</sup> Since summer 2000, the World Health Organisation (Department for Emergency and Humanitarian Action) has participated both in the ongoing development and in its implementation as basis for research and teaching.

The major impediments that influence the conduct of research and evaluations of disasters have been addressed systematically as the four pillars of importance to support the "Table of Research":

- 1. Conceptual Framework comprises standardized definitions and concepts necessary to minimize confusion;
- 2. Scientific Methods comprise methods validated by the social sciences and applied to disaster research and evaluation;
- 3. A Template identifies chronological phases and functions that should be incorporated into the structure of research and evaluation projects. (Regardless of type of disaster: the phase of impact may vary from seconds (earthquakes) to years (droughts), but still is the same phase.)
- 4. Inventory comprises a list of the Basic Societal Functions as well as the potentially appropriate indicators of change from pre-event baselines to be followed through the disaster phases.

This permits comparative research with both internal and external validity. In this context, the concept of "Best Outcome Without Assistance (BOWA) will be developed.<sup>3</sup> The ultimate goal is to identify and modify these key factors causing disasters before they happen. The conceptual framework allows such analysis. Complex emergencies and terrorist acts are included in this objective.

Appropriate Indicators will be identified to measure and differentiate between efficiency, effectiveness, and benefit. One commodity (or action) may serve both as a independent and dependent variable. Indicators may be quantitative or qualitative. Those indicators required for computation of the Disaster Severity Score and Health Disaster Severity Score have been developed. Further indicators must be developed during further use of the guideliens.

Conclusion: Use of the Disaster Research Template should provide all elements needed to analyse disasters, their potential for reduction, and their management in an institutionalised manner.

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**Keywords**: basic elements; BOWA; damage probability; disaster medicine; evaluation; qualitative methods; quantitative methods; research; severity scores; template; vulnerability

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## Future of Disaster Medicine

Disaster Medicine in the 21st Century

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The events in New York City and Washington, DC on 11 September, 2001 not only marked the largest, single, coordinated terrorist attack in history, but the resulting disinte-