There was no structured methodology used to design, conduct, and report what happened in a way that could be reproduced in subsequent studies. Since the landmark studies in the late 1980s, the qualitative data collection techniques that have been used for a century in the social sciences, were adapted for use in the study of disasters. Use of these techniques has facilitated the study of Disaster Medicine, and has fostered the conduct of scientifically valid and reproducible studies. The repeated demonstration of similar findings in the same and different disasters, thus, has increased the external validity of numerous studies (ability to generalize to other disasters), so that use of these techniques finally is accepted as being "scientific" by the medical community.

This presentation outlined many of the findings from studies conducted within the last decade that have gained sufficient validity to now be considered as "facts". In addition, the discussion will suggest possible implications of these facts for both planning and response to potentially catastrophic events. Such planning activities should include the elimination or modification of manmade hazards, augmentation of the ability of a society at risk to absorb future events without the generation of a disaster (absorbing capacity), as well as enhance the efficacy, efficiency, and benefits of future responses with a minimum of cost. Thus, these facts now must be applied to our practice of Disaster Medicine and should provide us with direction in our future responses. Using the Guidelines for Research and Evaluation presented at this conference and as outlined in the Executive Summary already published in PDM, the next decade should be filled with the identification of many more facts that will help us to refine our future work in Disaster Medicine. What exists now is only the beginning.

Lastly, a set of charges to the Disaster Medicine community was generated by the 5th APCDM. For the most part, these charges entail the review of all that is known about disaster medicine as identified by experts. These reviews are to be placed into a series of white papers. This work is essential to allow for assignment of priorities for future action. A major question surrounding such activities is identification of resources to support the required work. Efforts are underway to find such resources.

The time is right and we must move together to demonstrate our ability to deal with the crises of today and those forthcoming in the future.

Reference:

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Keywords: absorbing capacity; evaluation; disaster medicine; facts; future; hazards; research; risk; validity Prebosp Disast Med 2002;17:s15-16.

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## A Systems Approach to Triage and Management of a Large-scale Bioterrorist Event

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The most challenging management issues in a bioterrorist event are the demands it will place on the public health and emergency medical services. A large-scale (PICE stage I-III) event will require unique triage and management, and resource allocation decisions. The traditional emergency medical services systems (EMSS) will take a secondary role to emergency public health services. This discussion will define the management requirements and systems architecture required for the population cohort of susceptible, exposed, infected, removed and vaccinated (SEIRV Model) individuals. The concepts of lateral decision-making, triage exclusion criteria, and the use of measures of effectiveness are described for communicable and non-communicable agents. In addition, examples of lessons learned will be illustrated as well as the unique challenges faced by hospital emergency departments.

Keywords: decision-making; emergency medical services systems; management; measures of effectiveness; public health; resource allocation; systems; triage

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## Evaluation of Disaster Response in the Tottori-Ken Seibu Earthquake, 2000: A Preliminary Approach Using the Utstein Template

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Introduction: The Task Force for Quality Control of Disaster Management (TFQDM) of WADEM has developed the research Guideline and Utstein Template for use in disaster research. A major earthquake, M 7.3 on Richter scale, struck the Tottori-Seibu district on 06 October 2000. The Japanese Association of Disaster Medicine dispatched a site-visit research team to the affected area.

**Methods**: This presentation describes a trial use of the application of the Disaster Severity Score for assessment of the status and the response to the earthquake.

**Results**: The components of the Severity Score included:

- Medical indicators: Death = 0, Injury = 1, Communicable disease = 0, Other acute and chronic disease = 0, refugees = 2, Missing and trapped = 1, Hospital beds = 0, Total = 6.
- Public health: Portable water = 1, Food = 0, Nutrition = 0, Immunization = 0, Solid waste = 1, PTSD = 0, Total = 2.
- Impact on health care system: Health care providers = 0, Transport = 0, Health equipment = 0, Health supply = 2, Hospital beds = 2, Health administration = 0, Total = 8.
- 4. Preparedness: Plan = 4, Simulation exercise = 5, Training = 4, Total = 13.
- 5. Deficiency in response capacity: Health staff = 0,

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