had 96% sensitivity, 41% specificity, and 65% accuracy (in general physicians, respectively, 100%, 70%, and 85%).

**Conclusions:** Considering limitations in the usage of more advanced resources in Iran for screening and earlier initiation of therapeutic measures — especially telecardiography — simultaneous use of the screening questionnaire and physicians attendance at the patient’s bedside, not only results in lowering of EMS system expenses, unnecessary missions, and an increasing role of the EMS System in transportation of emergency patients, but also in comparison to present situation, do not produce meaningful differences in the rate of missed patients.

**Keywords:** cardiovascular diseases; chest pain; EMS system; screening


---

**Task Force Session:**

**Nuclear Biological Chemical Hazards**

**Co-Chairs:** Dr. Per Kulling; Dr. Victor Koscheyev

1. Director, Department of Emergency and Disaster Planning, National Board of Health and Welfare, Stockholm, Sweden; Co-Chair, WADEM Task Force on Nuclear, Biological, and Chemical Hazards

2. Co-Chair, WADEM Task Force on Nuclear, Biological, and Chemical Hazards

**Lessons of the Chernobyl Catastrophe: A Basis for Management of Other Large-scale Events**

Victor S. Koscheyev, MD, PhD; D ScD

University of Minnesota, Minneapolis, Minnesota USA

The lessons of the Chernobyl catastrophe are important. The unprecedented damage to society resulting from this disaster was on the highest social, medical, psychological, and technical scales. The size of this human-made disaster required intensive and immediate efforts from the government, specialists, managers, operators still working at the nuclear power station, clean-up workers, and still others who arrived at the scene of the disaster to provide their services. Millions of people were affected, and some still are struggling with health problems as a consequence of this disaster. The strengths and weaknesses in the disaster management at Chernobyl were analyzed in order to gain a better understanding so that future calamities can be better managed.

From a medical standpoint, there was a high level of contamination, difficult diagnosis and triage, and multifactorial health consequences. If any future disaster would have a component of contamination by isotopes, chemicals, or biological agents, the disaster scene would be dramatically changed and would require a significant correction of the management strategies at the scene. For such scenarios, it is crucial to identify common lessons and approaches for improving medical management in such circumstances.

In this presentation, a number of the lessons learned from Chernobyl will be discussed that are fundamental for improving the medical management of individuals, reconnaissance teams, and the general population.

**Keywords:** Chernobyl; disaster; human-made; lessons; management; reconnaissance; teams; triage


**Biological, Chemical, Nuclear-Radiologic Programme of the Swedish National Board of Health and Welfare**

Jonas Holst, MD; Per Kulling, MD

Emergency and Disaster Planning Unit, Swedish National Board of Health and Welfare, Stockholm, Sweden

At the 12th World Congress on Disaster and Emergency Medicine, the Swedish National Board of Health and Welfare Biological, Chemical, and Nuclear-Radiological (BCNR)-programme was presented. Since then, the BCNR-threat seems to have become even more pronounced, and further measures have been taken to improve preparedness against BCNR threats.

Today, the BCNR-preparedness programme includes the following: (i) groups of medical experts in the three areas (B, C, and NR) available on a 24h basis; (ii) first responder-guidelines on how to handle different situations in the field; (iii) planning guidelines for all three areas to be used by the county councils in their planning processes of the medical care system in Sweden; (iv) stockpiles of supplementary drugs, vaccines, and other equipment stored by the government; and (v) Centres of Research and Expertise.

During the last year, the Centres of Research and Expertise have developed their activities concerning network, methods, and capacity. During the last two years, both the Centre of Microbiological Preparedness (B-Centre) and the Centre of Nuclear Medicine in Disasters (N-Centre) have been consulted in real situations, the results of which are described briefly. As part of the Centre of Microbiological Preparedness, the ward-unit for highly contagious patients has been refined along with better possibilities to transport patients in an air ambulance over long distances. In autumn 2002, the C-Centre was established and is prepared to deal with toxicity in disasters.

Co-operation with the security police as with the regular police forces has been developed to ensure that the right competence is used when evaluating risks and threats. Decontamination at the scene of the accident/incident, still is a problem to be solved in co-operation with the Swedish Rescue Services Agency. International co-operation is important in sharing information, providing back-up resources, exchanging knowledge and experiences, etc.

**Keywords:** biologials; centres of research and expertise; chemicals; cooperation; decontamination; experts; guidelines; international; nuclear; radiation; security; Swedish National Board of Health and Welfare


**A Delphi-based Consensus Study into Planning for the Emergency Medical Response to Biological Incidents**

Ms. Nina Brown; Dr. Ian Crawford; Professor Kevin Mackway-Jones

Department of Emergency Medicine, Manchester Royal Infirmary, Greater Manchester Ambulance Services, NHS Trust, Manchester, UK

**Introduction:** The aim of this study was to achieve consensus for all phases of biological incident planning and emergency medical response.

**Methods:** A three-round Delphi study has been undertak-
en using a panel of 28 experts from specialities involved in all phases of biological incident planning and emergency medical responses. Areas that do not reach consensus in the Delphi study will be presented for discussion in syndicate groups at a conference funded by the United Kingdom Department of Health.

**Results:** A total of 132 out of 324 statements had reached consensus at >70% upon completion of Round 2. This represents 40.7% of the total number of statements. The results of the completed process are presented as a series of synopses consensus statements that cover all phases of biological incident planning and emergency medical responses.

**Conclusions:** The use of the Delphi methodology can achieve consensus in aspects of all phases of biological incident planning and emergency medical response. This can be translated into practical guidance for use at the regional pre-hospital and hospital levels. Additionally, areas of non-consensus can be identified and used to structure face-to-face debate.

Keywords: consensus; Delphi; event, biological; consensus; emergency medical response; planning

**The 2000 Olympic Games: The Sydney Experiences in Large-Scale Preparation for Major Incidents and Counter-Terrorism.**

Susan Webster, Paramedic Supervisor; Grame Malone
Ambulance Service of New South Wales, Australia

The Ambulance Service of New South Wales was contracted by the Sydney Olympic Games Organizing Committee to provide pre-hospital care and transport for athletes, spectators, and others from 02 September until 01 November 2002. Planning for this event was an ongoing process since the bid document was submitted in 1993. Officers from throughout the state of New South Wales were trained in chemical, biological and radiological hazards. Specialist groups of paramedics were trained in security issues relating to overseas dignitaries and their protocols. Senior officers were trained in event management and mass gatherings. Officers were segregated into areas of Olympic and urban domain precincts. The Ambulance Service of New South Wales also was committed to ensure that all routine ambulance requirements were fulfilled whilst roads were blocked for triathlon, cycle, and marathon events.

The Olympic Games experience ensured that the Ambulance Service of New South Wales, with experience in managing major events involving up to one million people, was more prepared for the changing focus of prehospital care in the new Millennium and the increased risk of terrorist attacks. Unusual occurrences now are referred to the State Health Department for further investigation. Call-takers in the ambulance operations center are alert to potential terrorist threats.

Major event organizers are aware that a “whole of government approach” to event planning is essential to ensure that the public of New South Wales receives the standard of care expected. All officers throughout the state are aware of the potential for major incident occurrences in their local area.

**Keywords:** mass gatherings; major event organization; Sydney Olympic Games

**Forum: International Health Social Sciences**

Co-Chair: Professor Fatima Alvarez-Castillo
Professor of Social Sciences, University of the Philippines

**HIV/AIDS: A Disaster Waiting to Happen and How It Can Be Prevented from a Health-Social Science Perspective**

Josefina G. Tayag, DPA

**Introduction:** Events that result in disasters not always are of the forceful and violent types: they can be insidious and smoldering, and thus, surprise countries and their constituents when they do erupt. This is the reason that prevention, alertness, and vigilance are musts.

This is the view taken of the current HIV/AIDS situations in this country. From the outside and the superficial perspective, it seems like the disease’s progression is slow and low, with no need for much concern: Everything seems under control. There is a national policy on prevention, monitoring, and treatment. The responsibility for these activities has been devolved to local government units. But, we must be more wary and concerned for an impending disaster.

**Reasons for Concerns:** People do not take the threat of HIV/AIDS seriously. They think it is the lesser concern considering more basic problems like food, shelter, clothing, and the like—for at least 40 to 50% of the people who are poor and marginalized. Despite the national policy, many local governments have yet to disseminate information and actively work for the law’s full implementation. Some 10 sentinel sites exist, but actual implementation and best practices have yet to be documented fully.

**Proposed Solution:** From a health-social science perspective, authorities must work more determinedly to implement the law, to reach out to a critical number of the population, to form a team of health and social scientists, or arm researchers and project directors with a health-social science perspective so that they understand the kind of holistic efforts that must be made. There is need for experts on the biomedical component, communication experts to find the right formula for dissemination of information, and experts on behavior modification to assist in translating knowledge into practice. Since the work will be done at the local governmental level, there is a need for people well-versed in politics and politicking, decision-making, and policy planning and implementation, and local governance to become involved. There also is a need for advocates, community organizers and mobilizers (those who can network between and among all existing organizations, including civil society) to participate in these processes. How to co-opt people to participate and make HIV/AIDS prevention their stakehold is an important challenge. The way of presenting the problem is critical considering a general lack of interest and concern for the disease exists. But, if viewed against other perspectives like sexuality, health rights, and...