

remote control. The transmission of live images using wireless networks already is possible. The growth of network speeds and the development of image processing technologies will enable transmission of higher and higher quality images. The transmission of all kinds of information from the disaster site could be implemented using several separate, compact, functional devices, and each one of them should be connected to the control centre.

The telecommunication connections available on the spot, if any, also should be utilized. From urban centres and along the main roads, we usually can use faster connections than are available in uninhabited areas. This is due to the fact that it is easier to transfer better quality live images from cities rather than remote areas.

**Key words:** acquisition of information; chemical disasters; communications; control centres; information; technical devices; telecommunications

### Evaluation of Health Disaster Management

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This initiative from the Norwegian Association of Disaster Medicine, to develop a globally accepted protocol for evaluation of Health Disaster Management, was formally adopted by the Nordic Society of Disaster Medicine in 1993. At the International Resuscitation Research Conference in Pittsburgh in 1994, the World Association for Disaster and Emergency Medicine (WADEM) decided to collaborate in the project. At the World Congress in Mainz, 1997, the WADEM General Assembly formally endorsed the process.

The Task Force on Quality Control of Disaster Management (TFQCDM) has had seven meetings and workshops. An important break-through in the process was the development of The Research Template in the Utstein Style at the Utstein Abbey outside Stavanger in 1994. On 01 March 1997, 50 experts from all over the world met at the Nordic School of Public Health in Gothenburg under the patronage of HRH Princess Christina of Sweden to discuss key problems of the Template. The 2nd version of the Template was presented at the Kobe Summit in Kobe, Japan, May 1997. The version presented at this Nordic Conference is the last of three. 13 Basic Elements for Disaster Management and their variables have been identified and listed. The principles behind a Vulnerability/Preparedness Index (VPI) have been established and also a Disaster Severity Score and a score for Health Disaster Impact are being developed. The group is working on the scientific approach, comprised of both quantitative and qualitative methods, and on a uniform disaster terminology. The generic part of this protocol aims at finding the lowest common denominators, regardless of type of disaster or where it takes place (geographically, culturally, and climatologically). This will enable us to compare and learn from seemingly very different scenarios.

To conclude, this TFQCDM protocol should help all actors in disaster management, and, to a large extent,

actors on development of cooperation, to objectively analyse the effect of their activities, and adjust and improve them accordingly.

**References:** TFQCDM: Disaster Medical Response Research: A Template in the Utstein Style. *PDM* 1996;11;16–24.

**Key words:** basic elements; disaster medicine; disaster responses; evaluation; preparedness; qualitative methods; quantitative methods; research; severity scores; template; terminology; vulnerability; vulnerability preparedness index

### What Are the Expectations for Preparedness of Medical Doctors and Nurses?

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Disaster preparedness concerning personnel at the hospitals in Preparedness Region II-DK, was investigated. The aim of this investigation was to describe the disaster preparedness among the hospital staff members and to describe the outcome of the Disaster Medicine courses given in the region—in theory as well as practice.

In the region, a questionnaire was sent to the chief doctor and chief nurse for each of the involved departments. A personal questionnaire was sent to all the doctors and nurses in the region who had participated in one or more courses in Disaster Medicine during the period from 1990–1995. Of the total numbers of doctors at the involved departments, 7% of the residents, 29% of the senior residents, and 56% of the consultants had taken a course, and as few as 2% had participated in a follow-up course to the primary one given in the region. Forty-one percent had used their acquired knowledge either in theory or practice: 55% for educational purposes, 11% for disaster planning, and 12% for buying equipment for the hospital. In general, easier access to follow-up courses is desired, and there seems to be a need to give more consideration to courses in Disaster Medicine.

**Key words:** disaster medicine; nurses; physicians; preparedness; training

### Toxicity of Organophosphates and Experimental Therapy

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Organophosphates (OPs) are used widely as pesticides and therapeutic drugs. Unfortunately, OP compounds such as sarin were used by terrorists against civilian populations in Japan in 1994 and 1995.

Acetylcholinesterase (AChE) hydrolyzes acetylcholine (ACh) at the neuromuscular junction and at the