

gist. In case of a mass disaster, they meet immediately and organize the DVI work. Often, pathologists and odontologists are sent to assist criminal technicians with the work at the scene.

Logistics is extremely important. Often, freezing carriages are used for transport and storage of the victims. If there are suitable autopsy facilities available, these will be used; otherwise autopsy rooms must be improvised. A center for gathering information about the missing persons, dental journals, medical information, and tactical information must be organized, and all post-mortem information must be reported to this center, so that the final identification can take place.

Since 1985, DNA analyses have been applied in DVI-work. Most of the 159 victims of the Scandinavian Start disaster in 1990 were identified based on dental records; whereas, after the air crash in Spitsbergen in 1996, all but one of the 141 victims were identified based on DNA profiles. However, forensic odontologists are not outdated: in the recent terrorist bomb attacks in Madrid, 146 out of 191 victims were identified by means of dental records. Based on experience of mass disasters during the last five years, most western DVI teams start identification work using all available means, and adjusting the extent of the operation according to the conditions.

Keywords: criminal technicians; events; logistics; medico-legal; odontologists; pathologists; police; responsibility; terrorist; victim identification

Rognum O: Handling of medico-legal work in greater accidents and catastrophes. *Prehosp Disast Med* 2004;19(S1):s4-s5.

NATO's Role in Disaster Management and International Cooperation—Joint Medical Committee's Contribution

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In May 1991, the North Atlantic Council (NAC) decided to establish the Joint Medical Committee (JMC). The JMC works according to its Terms of Reference (TOR) and the NAC approved Ministerial Guidance for Civil Emergency Planning (CEP), and reports to the NAC via the Senior Civil Emergency Planning Committee (SCEPC).

The roles of the CEP are to support the Military Operations (Article 5), Crisis Response Operations (non-Article 5), and the National Authorities in Civil Emergencies, to protect the civilian population against the effects of weapons of mass destruction (WMD), and to cooperate with partner countries.

In addition to the JMC, there are seven planning boards and committees providing the SCEPC with advice, input, and studies concerning different fields of activities in a modern society (transport, food and agriculture, civil communications, industry, and civil protection). National representation in the JMC is both civil and military, both currently serving each with background and current services in the healthcare profession. The JMC also may draw upon a group of medical experts: disaster medicine, movement of casualties, chemical, biological, radio-nuclear, tropical medicine, medical logistics, public health, military medicine, and blood provision and supply.

The JMC responsibilities include medical emergency planning, information, and recommendation to NATO, participation in exer-

cises, conducting studies, addressing medical logistic issues, and carrying out tasks from the SCEPC.

The JMC also is cooperating with other NATO committees/bodies on the military side, especially when it comes to WMD issues. The Committee is providing medical support to the Euro-Atlantic Disaster Response Coordination Center (EADRCC) when the Center is activated in disaster management or in exercises. In addition, the JMC participates in the planning and accomplishment of seminars/workshops and in the development of treatment protocols for CBR-N agents. It is important for the JMC to emphasize the work with plans and procedures and to contribute to the medical interoperability within nations in medical emergencies.

The JMC cooperates with the Civil Aviation Planning Committee (CAPC), the military authorities concerning aeromedical evacuation, the Committee of the Chiefs of Military Medical Services in NATO (COMEDS) when it comes to civil-military support, the Food and Agriculture Planning Committee (FAPC) when it comes to medical justification for the introduction of restriction of movements of people and animals, and the Civil Protection Committee and the WMD-Center in the protection of the civilian population against WMD.

The CEP/JMC in NATO have a dialogue with the World Health Organization. Information is exchanged between NATO and the European Union.

The work in the JMC is based both on the Work Program developed for a period of two years (2003–2004) and CEP Action Plan. In this regard, the JMC provides civil inputs to the Inventory of National Medical Capabilities concerning CBR-N attacks, civil inputs to a Laboratory Response Network, and conducts a review on Epidemiological Surveillance Systems in the EAPC countries.

Keywords: assistance; biological; chemical; civil-military cooperation; disaster management; humanitarian; Joint Medical Committee; North Atlantic Treaty Organization (NATO); planning; radio-nuclear; role; terrorism; weapons of mass destruction (WMD)

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International Collaboration in Humanitarian Assistance: The Military-Civilian Relationship

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Cooperation between military and civilian agencies covers a large variety of relationships. It includes the conduct of the occupants towards the occupied (and vice versa), the way to avoid civilian structures when waging war, and recently, how military forces and humanitarian agencies may join forces to promote health, peace, and well-being.

The dual faces of a military force, aimed at preventing disasters through a mechanism of deterrence and their ability to actually create disasters, complicate this relationship between the military forces and the humanitarian agencies, and also between the military forces and the affected population.

On the other hand, military forces, as a rule, command huge quantities of resources, which when properly administrated, are

capable of addressing both complicated and urgent humanitarian matters. To benefit fully from the potentials of the use of these military resources, a thorough understanding of the different sets of paradigms and backgrounds as reflected in different military set-ups, is mandatory by all parties involved. This includes understanding the conceptual differences between a UN-Peace operation (commanded by the UN system) and military alliance-led operations (e.g., commanded by NATO). It includes the differences between a professional military force and a force based on drafted civilians where the population has compulsory military service. It also necessitates a thorough distinction between when Civilian-Military Cooperation is seen as a "Combat Support Operation" (current NATO-CIMIC doctrine) or as Civilian-Military Coordination (CMCoord) as presented by the UN Office for Coordination of Humanitarian Affairs. **Conclusion:** Inter-agency and international cooperation/coordination is a must for all international humanitarian assistance. Beyond providing a safer environment, military forces could contribute significantly to humanitarian operations. However, all such relationships have strengths, weaknesses, opportunities, and threats. Understanding them will facilitate any such joint operations.

Keywords: civil-military cooperation; health; humanitarian operations; international; North Atlantic Treaty Organization (NATO); peace; resources; United Nations (UN); war

Sundnes KO: International collaboration in humanitarian assistance: The military-civilian relationship. *Prehosp Disast Med* 2004;19(S1):s5-s6.

How to Make a Local Plan Functional

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Norwegian municipal administrations have been making emergency/preparedness plans for decades. Former plans mainly included preparations for war, but never were put into action. By 01 January 2002, new laws of health and social emergency planning were made effective. This law shifted the focus for planning preparedness for war towards disasters in civil life.

Making a health-emergency plan for municipal services is demanding. Keeping it updated at any time is equally exacting work. At the beginning of making new plans, some principal questions had to be dealt with:

1. How can these plans be made in the most effective way?
2. Who are the natural participants in making one plan that every municipal administration easily could adjust to their own?
3. How can the plan give easy access to basic knowledge for emergency situations and at the same time give exact information about special situations considered to be at high risk for each community?
4. How can the plan be functional and easy to update?

During the session, a process originally conceptualized by public health doctors, continued to be worked on by the Norwegian Board of Health in the Buskerud. It constructed a workshop with the aim of answering all the questions above which will be presented. Did they make it? The plan can be downloaded at www.ovre-eiker.kommune.no.

Keywords: disasters; health emergencies; plan; war; workshop

Braaten E: How to make a local plan functional. *Prehosp Disast Med* 2004;19(S1):s6.

Cross-Professional Incident Collaboration (TAS)

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Background: The cross-professional incident collaboration (TAS) project includes seminars in emergency medicine, first aid, and special courses designed to promote cooperation between municipality resources, such as physicians, nurses, ambulance staff, firefighters, and police officers.

Methods: The whole course lasts four days: three days for health professionals and two days for firefighters and police officers. A project group with representation from Norwegian Air Ambulance (NLA) and the target group have worked out the program for the course. The purpose is for better EMS and better on-scene cooperation. TAS courses were offered to all Norwegian municipalities for free. One hundred, ninety of 435 municipalities have applied, and all applicants have been given a course in 1999-2003. The schedule currently is being revised to oblige the need for training local resources in a larger scale including the administrative machinery.

TAS2 – A New Approach to Extrication

For the patient injured and trapped in a motor vehicle, every minute can be important. To shorten the on-scene time, supervisor Trond Boye Hansen,³ in cooperation with the fire department, has developed a new method for rapid extrication.² The wreck is quickly pulled back toward its original shape using wire, chain, winch, and hydraulic rescue tools. The goal is to minimize the time to extricate the critically injured patient, to a maximum of 10 minutes. A project group in NLA, together with emergency professionals from Oslo, has developed a two-day course to implement this method for local emergency resources. The course also focuses on better cooperation on-scene.

Courses currently are offered to municipalities dealing with a large number of serious traffic crashes. Thirty courses have been accomplished.

Results: The participants were asked to evaluate their personal benefit through a questionnaire. More than 75% scored 4 or 5 on a scale from 1-5 (1 being "no benefits" and 5 being a "very large" benefit).¹

References

1. Erik Ravne: "Kursevalueringer TAS 2000".
2. Wik L, Hansen TB, Kjensli K, Steen PA: "Rapid extrication from a car wreck." Oslo, 2004.
3. Supervisor, Division of Prehospital Emergency Medicine, Ullevål University Hospital, Oslo, Norway.

Keywords: crashes; cooperation; education; emergency medicine; emergency medical services; extrication; firefighters; municipalities; police

Barstein J: Cross-professional incident collaboration (TAS). *Prehosp Disast Med* 2004;19(S1):s6.