

# Confédération Interalliée des Officiers Médicaux de Réserve Interallied Confederation of Medical Reserve Officers



Summer Congress 2005 – GHENT (Belgium)  
Congrès d'été 2005 – GAND (Belgique)

## Abstracts of presentations Résumés des conférences







**THURSDAY 04 AUGUST 2005**

**Thursday morning : *CIOMR Belgian scientific programme***

Chair : Med Lt Col (R) Jacques FONDU (BEL)

- 0900-1015 B-FAST - Belgian First Aid and Support Team  
Lessons learned from the B-FAST mission in BAM (IRAN)  
*Lt Col BEM Eddy LAPON (BEL)*
- 1015-1035 *Coffee break*
- 1035-1105 Stress in peace keeping missions, the importance of training the staff.  
*Med Lt Col (R) Alexander VAN ACKER (BEL)*
- 1105-1135 Ressources et besoins : reflets de trois missions médicales au Bénin  
*Med Cdt (R) Michel LEJEUNE (BEL)*
- 1135-1220 The medical reserves in the transformed alliance  
*Med Gen Maj Roger VAN HOOFF (BEL)*
- 1220-1230 Closing remarks
- 1230 - 1400 *Lunch*

**Thursday afternoon : *CIOR Symposium 2005 Gent:***

**“The New NATO and the Role of the Reserves: Their Impact on Post-Conflict Activities”**

- 1400-1600 Panel “The Medical Front: Humanitarian Aid or Military Mission?”  
Chair : Med Gen Maj Roger VAN HOOFF (BEL), Chairman COMEDS
- Panel
- Col Marcia QUINN, Chairman CIOMR (CAN)
  - Dr. Reginald MOREELS (BEL), former president MSF Belgium, former secretary of state for development co-operation
  - LtCol BEM Eddy LAPON (BEL), coordinator B-FAST (Belgian First Aid and Support Team)
- 1600-1630 *Coffee break*
- 1630-1830 Symposium Closing Session  
Civil-Military Success Stories: The Perspective of The Young Reserve Officers  
Closing remarks

**FRIDAY 05 AUGUST 2005**

**Friday Morning :** *ICC – Meeting Room Van der Goes*

**Scientific Programme “Lessons learned from Peacekeeping and Humanitarian Operations”**

Chair : Cdr Stef STIENSTRA (NLD)

- 0830-0850      Multinational CIMIC needs CCC+D = Command, Control, Communication and Diplomacy  
*Col Gunter Ruetter (DEU)*
- 0850-0910      Joint training for Humanitarian Operations: Military/NGO partnerships  
*Lt Col Kevin Davies (GBR)*
- 0910-0930      Health Reconstruction in Southern Iraq: Reconstruction in Practice  
*Maj Andrew Mathieson (GBR)*
- 0930-0950      MOET in Iraq: enabling Iraqi doctors to develop a teaching model for obstetric emergencies and trauma.  
*Maj Andrew Mathieson (GBR)*
- 0950-1010      Dealing with Psychological Trauma: lessons learnt from operations in the Balkans, Afghanistan and Iraq  
*Sr Capt Andrew John Gritt (GBR)*
- 1010-1030      L'aide humanitaire dentaire en milieu opérationnel  
*Maj Alain Ouellet (CAN)*
- 1030-1100      *Coffee break*
- 1100-1120      The Canadian Forces Deployed Physiotherapy Capability: Lessons Learned from the Peacekeeping Operations in Bosnia  
*Maj Luc J. Hébert, PhD, PT (CAN)*
- 1120-1140      Terrorist Attack in Peace Keeping Operation in KERBALA, IRAQ  
*Brig. Gen. Prof. Stoyan Tonev, MD, PhD; Prof. Kamen Kanev, MD, PhD, Prof. Dimitar Lekov, MD, DSc (BGR)*
- 1140-1200      Comparative analysis between previous civil and later military humanitarian operations in Indonesia following the disaster of the Tsunami.  
*2nd Lt. Miguel Sanchez, 2nd Lt. Raul Muñoz (ESP)*
- 1200-1330      *Lunch*  
*ICC Artevelde forum*



**Friday afternoon :** ICC – Meeting Room Van der Goes

**Scientific Programme – Free Papers**

Chair : Cdr Stef STIENSTRA (NLD)

- 1400-1420 U.S. Army Medical Research: More than Combat Casualty Care  
*Capt Mark G. Hartell (USA)*
- 1420-1440 From assistance to war: Operational Medicine defined  
*Col Beadling, Maj Douglas W. Rink (USA)*
- 1440-1500 *Chemical Attack or Nature's attack?*  
*Lt Col Joylyn M Grant (USA)*
- 1500-1520 An unusual preoperative finding.  
*Capt Newton Ede (GBR)*
- 1520-1540 Opération BERYX : identification des victimes de la catastrophe du tsunami  
*MC Yves Schuliar, CDC Guy Joly (FRA)*
- 1540-1600 Thai Tsunami, Forensic Aspects  
*SrgCdr Peter J. T. Knudsen (DNK)*
- 1600-1630 *Coffee break*
- 1630-1650 « MISTRAL » Bâtiment de Projection et de Commandement - Plate-Forme navale de Soutien médical  
*MC Christian Leroux (FRA)*
- 1650-1710 Checking the functioning of segments of the civil protection and disaster relief system at local level  
*Lt Primož Rus (SLO)* (CANCELLED)
- The evolution of emergency medicine in recent Canadian deployments  
*Maj Sunil Sookram (CAN)*
- 1710-1730 The awareness that terrorists can misuse the transport and storage of hazardous substances to disrupt society: The importance to make an inventory of critical locations and to secure these.  
*Cdr Stef Stienstra (NLD)*

## B-FAST - The Belgian First Aid and Support Team

Lt Col BEM LAPON (BEL)

B-FAST is an interdepartmental structure, gathering the Services of the Prime Minister, the Federal Public Services Foreign Affairs, Foreign Trade and Development Co-operation, Public Health & Environment, Home Affairs, Budget and Defence. It is under the authority of the Minister for Foreign Affairs.

When a crisis breaks out, speed of reaction is of paramount importance; a decision must be taken immediately and the Belgian emergency teams must be mobilised within 12 hours following a decision to act. Action on site lasts in principle 10 days.

At international level, Belgium has actively taken part in the setting up of the European coordination mechanism. Under this mechanism the Commission assumes responsibility for compiling an inventory of the means available in the Member States (which remain free to participate or not) for intervention in foreign countries, setting up a permanent communication network and establishing an education and training programme for the teams.

Looking to the future, other forms of co-operation and collaboration are currently being considered or are under way.

## Lessons learned from the B-FAST Mission in BAM (IRAN)

Lt Col BEM LAPON (BEL)

On 26 December 2003, a powerful earthquake struck southeastern Iran, killing over 30.000 people, injuring tens of thousand, leaving scores of homeless people and destroying much of the city of BAM. A B-FAST team was sent into the region. For the first time European headquarters for the coordination of the European aid were set up, functioning under the orders of the UN.

Lt Col BEM LAPON  
Born on 04 September 1957.

### Studies

Royal Military Academy 1977-1981

Postgraduate Disaster Medicine and Disaster Management (KU LEUVEN) 1990-1991

Staff Course (3<sup>rd</sup> cycle) 1997-1998

United Nations Disaster Assessment and Coordination Course (UN OCHA GENEVA) – UNDAC Expert – 2004

UN Civil Military Coordination Staff Training Course (UN OCHA SWITZERLAND) – 2004

UN Basic Security Course (UN OCHA SWITZERLAND) – 2004

UN Civil Military Coordination Course (UN OCHA SWEDEN) – 2003

UN Disaster Assessment and Coordination Advance Program (UN OCHA NORWAY) – 2003

Humanitarian Awareness Course – Royal School of the Medical Service GHENT – 1999

ACE Medical Resource Guidance Model Introductory Course – SHAPE OBERAMMERGAU – 1991

Military Parachutiste Certificate “A” (1992)

Commando Certificate “A” (1992)

Winter survival course – 1997 – LAPLAND – Swedish Special Forces

### Functions

2003-2005 ACOS Operations and Training – Div Ops Plans – Chief Bureau Humanitarian Operations – B-FAST  
2001-2003 ACOS Operations and Training – Medical Concepts  
1998-2001 COMOPSMED - G3 Operations and Training  
1994-1997 Bde ParaCdo – 16 Cie Med ParaCdo – first unit commander  
1987-1993 1(BE) Corps – Med Comdo BSD – Adj G3 Ops &Trg (Germany)  
1982-1987 4 Cie Med – 2Comd

#### International operations en deployments

Tsunami South-East Asia (2005) Chief Co-ordinator B-FAST for (BEL) DVI team in KAO LAK (THAILAND)  
Earthquake MOROCCO – AL HOCEIMA (2004) Chief Co-ordinator B-FAST  
Earthquake IRAN - BAM (2003) Chief Co-ordinator B-FAST and Co-ordinator EU OSOCC  
Earthquake ALGERIA (1997) Co-ordinator B-FAST  
Humanitarian operation GREEN STREAM – BRAZAVILLE – Comd 16 Cie Med ParaCdo  
SOMALIA (KISAMYO) – 1993 - preparation to 16 Cie Med ParaCdo Command

#### Co-ordinator function during international exercises

Ex EU ESCEX 04 (2004) – FINLAND – Chief Co-ordinator B-FAST – UNDAC expert – evaluator EU System  
Ex DART (Ex with (NLD) Disaster Assessment and Reconnaissance Team) (2004) BONAIRE  
Ex DACIA (2003) - ROMANIA – Chief Co-ordinator B-FAST  
Ex FERGHANA - UZBEKISTAN (2003) – Co-ordinator B-FAST  
Ex ICELAND – 2002 – ICELAND – Co-ordinator B-FAST  
and other

## Stress in peace keeping missions, the importance of training the staff.

Lt Col (R) Alexander VAN ACKER, M.D. (BEL)

Since '89, the fall of the Soviet empire, another mission became central to our armed forces: peace keeping. Also conscription was stopped and there was a switch to a professional army, strengthened by an active, meaning well trained, reserve.

As peace keeping missions usually imply smaller units, battalion or company level, and going to insecure "exotic" places, with young troops a specific aproche has to be worked out. As small units have to contend with the stress of their troops without the formal support of large medical units, as was planned for in the cold war battlefield doctrine, the staff members, NCO's , petty officers and officers, could be specifically trained to detect in time and to cope, locally, with psychological problems of the team members.

Né à Gent, Belgique, en 1950

Humanités classiques, études de médecine à la RUG ( Gent)

Neuropsychiatre, travaillant en pratique privée, avec une équipe, faisant aussi des expertises judiciaires et privées.

A travaillé notamment en Angleterre ( St Georges, London Univ. ), Allemagne (Köln Uni-Kliniken ), Australie ( Melbourne Uni), Afrique du Sud ( Bloemfontein), ...

En tant que réserviste chef de section au bureau Appui spécialisé et Commandement, au staff de COMOPSMED

## Ressources et besoins : reflets de trois missions médicales au Bénin

Cdt (R) Michel LEJEUNE, M.D. (BEL)

La composante médicale effectue les missions qui lui sont confiées. La Belgique et les pays limitrophes sont de longue date des terrains d'appui connus par les médecins. Le (re)déploiement régulier de troupes en Afrique impose une adaptation des moyens médicaux. Les réservistes actifs et les militaires actifs contribuent

de la même manière aux réussites de ces nouvelles missions. Les compétences nécessaires se déclinent sur plusieurs plans : formation initiale, préparation médicale et logistique, reconnaissances locales et transmission correcte des informations pertinentes, projection et déploiement planifié, intégration dans un dispositif politico-militaire bien documenté, attention soutenue au personnel et environnement de travail, relations avec les ressources humaines et matérielles locales, adaptabilité aux situations locales. L'exposé évoquera ses diverses approches par le biais d'illustrations extraites des missions Bénin 2002, 2003 et 2004 réalisées par le Med Cdt (R) Lejeune.

#### Biographie

Med Cdt (R) Lejeune Michel

DN 23.02.1965

Service militaire au CMTC de Marche-en-Famenne en 1992/93

PVE 03 mois en 1993

Réserviste actif à l'EMI 22 de Landen

Participation régulière à manoeuvres ou opérations AMG.

Diplôme de médecine générale à l'Université de Liège en 1991

Diplôme de médecine tropicale à l'Institut de Médecine Tropicale (IMT) Antwerpen en 1992

Licence en médecine d'expertise à l'Université de Liège en 1994

Maître de stage 4<sup>ème</sup> doctorat Université de Liège, assistant 1/1 à l'Université de Liège et l'Université Catholique de Louvain (UCL) depuis 2000

Collaborateur à l'Université de Liège depuis 2004 (tutorat ARC)

## The medical reserves in the transformed Alliance

Roger VAN HOOFF, M.D. (BEL)

Major General , Aide of the BE King, Chairman COMEDS

The transformation of the NATO forces in general and of the military medical services in particular gives new challenges to the military medical reserves. In the future they certainly will have the opportunity to be more involved in the different operational tasks of the military medical services, at home and abroad. The prerequisite for the reservists is to be well trained not only in medical but also in military matters. An efficient use of reserve forces will slow any eventual plan to outsource the military medical support.

#### CURRICULUM VITAE

Major General Doctor Roger VAN HOOFF was born on January the 9<sup>th</sup> , 1947.

In 1964 he started his medical studies at the Catholic University of LOUVAIN (Dutch section : KU LEUVEN).

In 1965 he was admitted to the Royal School of the Military Medical Service in Brussels as a trainee medical officer. He graduated as Medical Doctor in 1971.

He was sent to SIEGEN (Belgian Forces in Germany) to be Medical Advisor of the 1<sup>st</sup> Armoured Infantry Brigade and General Practitioner in charge of the military garrison in Siegen from 1971 to 1973.

From 1973 to 1978 Lieutenant doctor Roger VAN HOOFF returned to the University Hospital of LEUVEN to be assistant in internal medicine (1973-1975) and in cardiology(1976-1978).

In 1976, he followed the 'Course in Advanced General Medicine' at the Royal Postgraduate Medical School, Hammersmith Hospital, LONDON.

On the 1<sup>st</sup> of October 1978 he was admitted as specialist in Internal Medicine – Cardiology.

From 1978 to 1981 he was appointed as a cardiologist at the Belgian Military Hospital in KOLN (Germany).

On the 1<sup>st</sup> of November 1981 he was sent to the Military Hospital QUEEN ASTRID in BRUSSELS. Besides his work in the cardiology department, he was appointed Chief of the Epidemiology and Medical Research unit in the same hospital. In 1982 he followed the 'Course in Epidemiology and Biostatistics' at the New England Institute of Epidemiology, University of Massachusetts, Amherst (BOSTON), USA.

On the 26<sup>th</sup> of December 1982 he was promoted Major doctor.

From 1983 to 1998, Dr. Roger VAN HOOFF worked as research fellow in the laboratory for Hypertension and Cardiac Rehabilitation at the University of LEUVEN. He was appointed consultant in the department of Cardiology at the University Hospital in LEUVEN where he supervised the outpatient clinic of sports cardiology and cardiac rehabilitation.

On the 26<sup>th</sup> of December 1994 he was promoted as colonel doctor.

In 1995 he left the Military Hospital QUEEN ASTRID to be the scientific advisor of the Chief of Staff of the Belgian Medical Service.

From 1997 to 1999 he was appointed Director of the Military Hospital QUEEN ASTRID in BRUSSELS.

On the 26<sup>th</sup> of June 1999 he was promoted major-general doctor and became Chief of Staff of the Belgian Military Medical Service on the 1<sup>st</sup> of July 1999 and Chairman of the Committee of Chiefs of the Military Medical Services (COMEDS) in NATO. He is also Deputy Chairman of the Belgian Red Cross.

The Royal Academy of Medicine of Belgium accepted him as a member of honor on the 24<sup>th</sup> of November 2001.

On the 1<sup>st</sup> of January 2002 he becomes the Commander of the Medical Component in the new Defense Staff.

By Royal Decree on 21<sup>st</sup> of July 2002 he is appointed as Aide to the King.

On the 2<sup>nd</sup> of January 2004 he is appointed as Chief of the Plans Division of the Staff Department "Strategy".

Major General doctor Roger VAN HOOFF is member of many scientific societies.

He published as first author and as co-author numerous scientific medical articles in various peer reviewed international and Belgian medical journals.

## Multinational CIMIC needs

### CCC+D = Command, Control, Communication and Diplomacy

Gunter H. Ruetter, MD, PhD, COL (MC) GE AFR (DEU)

Peacekeeping and humanitarian missions as well use to require extensive cooperation with local population, local and foreign military units, local and foreign GOs and NGOs. Multinational CIMIC cannot operate successfully following regular "Command, Control, Communication" i.e. CCC rules alone, because the participating parties are not bound in a sound military structure. It is mandatory for success of every peacekeeping and humanitarian mission that at least in the end there is a major acceptance of these missions by the local population, local and foreign civilian organizations and foreign military units. Insofar as local military is synergistic and involved, it is imperative to have their appreciation as well. As a result diplomacy skills are required in order to convince all players and win their appreciation. Germany's participation in peacekeeping and humanitarian operations in Afghanistan, the Balkan, Indonesia and others has been showing this experience. Intercultural communication, moderate attitude and diplomacy skills are crucial for success.

**Civilian:** President, Monitoring Force Group, [www.monitoring-force.com](http://www.monitoring-force.com) (Muenster - Bucharest - Paris - Washington, D.C., Sophia - Barcelona - Tunis - Milan - Moscow): Business development and global strategy for a multinational Contract Research Organization (currently around 100 employed professionals). President, Monitoring Force USA, Inc. Washington, DC: General management of a Contract Research Organization (CRO) involved in Phase I through Phase IV clinical trials and clinical trial crisis intervention consulting for Major pharmaceutical industry companies, consulting and studies in Defense Medicine, Public Health and Disaster Response. Founder & Managing Director, Monitoring Force GmbH, Muenster, Germany. Founded and built a multinational CRO group in 9 countries in Europe and

America to date comprising medical fields like allergies, ophthalmology, endocrinology, CNS, Infectious diseases, surgery and urology.

**Military:** Commander, Reserve Field Hospital Group 7319, Germany, [www.consensus2003.de](http://www.consensus2003.de) ; Chairman, Joint Medical Corps Reserve Forces Organization, Germany, [www.reservistenverband.de](http://www.reservistenverband.de) (Arbeitskreis Sanitätsdienst), Head of Division (R), GE Ministry of Defense, Joint Medical Staff (Joint Medical Service Reserve Forces, CIMIC and Disaster Medicine).

17 years of professional experience and continuing education such as a scientist at the German Cancer Research Center, physician and surgeon at the University of Marburg, Medical Director and General Manager in various corporations of the pharmaceutical industry gave him a broad knowledge and basis for a medical entrepreneurship when he set up his own business by founding a contract research organization in 1995. Starting from scratch, this company has been experiencing a steady growth and is located in 9 countries in Europe and America, meanwhile employing around 100 clinical research professionals. Several academic as well as industrial, political and economical organizations in Germany and USA continue to inviting him for lectures about his experiences or statements in order to facilitate and educate about medical entrepreneurship. Concomitantly he has been bringing forward projects like CONSENSUS 2003 during his military career as a medical corps reservist in the German Air Force.

## Joint training for Humanitarian Operations: Military/NGO partnerships

Lieutenant Colonel Kevin Davies RRC, TD\*tacsc QARANC(V)

The UK position on Peace Support and Humanitarian operations is documented in Joint Warfare Publications 3-50 and 3-52. Both highlight the importance of collaboration, the benefits of cooperation with both national and international NGOs are emphasised. This paper will report on a joint UK Military, NGO and Higher Education initiative to share learning utilising an Operations Other Than War scenario. The Exercise scenario was developed with professionals facilitating an MSc in Disaster Healthcare and commenced with a period of training similar to UK OPTAG. Both parties had a clear understanding of ethos, capability and ethical underpinning that impacted upon each organisation. A three day exercise followed during which participants had to collaborate in the deployment of a temporary health facility while working within the constraints of the scenario. Participants were very positive about the experience and highlighted that collaboration of this nature would enhance understanding and cooperation when deployed.

Senior Nursing Officer, 203 Field Hospital

Responsible for all Nursing matters within a 200 Bed Field Hospital both in peacetime and on operations.

Col Davies trained as a nurse in South Wales in the late 1970's and subsequently worked in Accident and Emergency. He joined the TA in 1983 initially with 203 (Welsh) General Hospital. In 1987 he joined the Regular Army and following Sandhurst was posted to 34 Evacuation Hospital and the Duchess of Kent's Military Hospital in Catterick. Volunteering for Service with Airborne Services Col Davies was posted to 23 Para Fd Amb in late 1987 and served there until 1990 as Nursing/Training Officer. On completion of his SSC Col Davies returned to Wales as a lecturer and joined 144 Para Fd Amb (V) where he served as a detachment Commander and Training Officer for eight years before becoming the Sqn Commander of 144 Para Med Sqn(V). He was appointed a Member of the Royal Red Cross in the Birthday Honours 1997 in recognition of service with the Implementation Force in Bosnia during 1996. On completion of his tenure at 144 he returned to 203 (W) Fd Hosp (V) in 2002 and was appointed SNO on promotion in 2003. Col Davies has served in many areas of the world including Bosnia, Kenya, Kosovo and Iraq with 34 Field Hospital as Deputy Senior Nursing Officer on Op TELIC 1. He is course director for an MSc in Disaster Healthcare and is currently registered for a PhD by portfolio which will bring together his work in curriculum development, education delivery, project work and publication in this area.

# Health Reconstruction in Southern Iraq: Reconstruction in Practice

Maj Andrew Mathieson (GBR)

Before the Gulf War of 1991, Iraq was described by the United Nations (UN) as a high–middle income country with a modern infrastructure, with the Iraqi people enjoying the benefits of one of the most extensive and sophisticated healthcare and education systems in the Middle East. The Iran/Iraq War, the Gulf War of 1991 and the imposition of UN sanctions resulted in significant damage to Iraq's infrastructure, including health systems and facilities. Health care was further affected by critical shortages of medical supplies, the deteriorating environment, malnutrition and difficult socioeconomic conditions. Matters were further exacerbated by the invasion of US-led coalition forces in early 2003.

The author was mobilized and spent the last 6 months of 2003 as military liaison Officer for MND(SE) and head of the health team in Southern Iraq. Under his leadership \$4.7M was committed to health reconstruction and capacity building in the South.

Discussion on the 10 priorities for health assessment;

The ten priorities are:

- |   |   |    |                                    |
|---|---|----|------------------------------------|
| 1 | Initial Assessment                          | 2  | Water & sanitation                 |
| 3 | Food & nutrition                            | 4  | Shelter & site planning            |
| 5 | Measles immunization                        | 6  | Health care in the emergency phase |
| 7 | Control of communicable disease & epidemics | 8  | Public health surveillance         |
| 9 | Human resources & training                  | 10 | Coordination                       |

I would then go onto discuss the priorities in the post conflict phase

In this post acute phase priorities were defined within the following broad headings and an action plan drawn up with the agreement of the Governor, local managers, Coalition Provisional Authority and UK military.

1. Security - high visibility patrols and training the Iraqis to police themselves
2. Water & Sewage - free drinking stations set up, new pumps, refurbish treatment centers and test
3. Food & Nutrition - help farmers and fishermen provide food, import for the short term
4. Infrastructure - repair roads, start busses & train running, provide fuel for cars and power
5. Control of Communicable Disease - re-introduce vaccinations, monitor & manage outbreaks
6. Public Health Surveillance - work with locals, WHO (when present) and military on wide PH front
7. Coordination of Effort - regular open meetings linking locals/WHO/NGOs and military

Education & Training - support local medical training, develop links to UK and promote in-country medical education and higher level training

He graduated from the University of Strathclyde with a BSc (HONS) Environmental Health and entered local government as an environmental health officer (eho) in 1988. After working in a number of local authorities at a senior level for approx. 10 years, he decided to enter academia. This has allowed him to give new student ehos the benefit of his knowledge and experience and has allowed him to pursue various research interests in the areas of public health and environmental hazards. Two major research projects on eh are in the final stages of receiving European funding. He will be delivering papers at the Chartered Institute of Environmental Health Officers annual congress later this year and has been invited to San Diego to present papers at the American Environmental Health Congress.

He has been a TA eho for 15 years and has served in a number of different roles. He was the first eho(v) to be appointed as an SO3 Med Prev(V) at a BDE HQ and since completing that function in 1999 he has been appointed as Deputy Head of the Environmental Health Career Employment Group (Volunteers) and act as focal point for all eh matters in the Territorial Army.

He has written a number of papers for peer reviewed journals and on environmental health and the Territorial Army.

He was mobilized in 2003 and served for 6 months in central Basrah as the Health Liaison Officer for the Multi National Division (South East). I was appointed Head of the Coalition Provisional Authority (South) health team and led a multi national health team during some of the most difficult times in Basrah.

## MOET in Iraq: enabling Iraqi doctors to develop a teaching model for obstetric emergencies and trauma.

Maj Andrew Mathieson (GBR)

In April 2004, an international group of health professionals (mainly UK military) traveled to Shaibah airbase in Southern Iraq to deliver courses on emergency obstetrics and trauma, based on the principles of the MOET (Managing Obstetric Emergencies and Trauma), to Iraqi doctors and midwives.

MOET is a flexible course and is held in high regard by all UK military and non-military practitioners.

This trip was the culmination of a year's efforts by various military members of the team and other interested parties (including the Royal College of Obstetrics and Gynaecology, British Council, DfID and Iraq Ministry of Health).

Following the success of the initial visit, a second trip was arranged to deliver a Generic Instructor Course and a third MOET course.

Following the third trip (expected June 2005) Southern Iraq will have a self sustainable team, trained to deliver MOET style courses to local Iraqi health professionals.

The team overcame many difficulties including;

- language – by using UK & Iraqi Doctors as translators for the midwives,
- environment – 60°C at the heart of the day and dust like talcum powder that stuck everywhere,
- security – force protection for staff and students was provided by the British Forces
- politics – UK Department of Health stated ‘no votes in Iraq’
- finance – DfID states, ‘only large scale National programmes will be funded’, MOET got nothing
- suspicion – the Iraqis still ask ‘what is in it for you’ understandably they found it hard to trust
- continuity – the MOET trained Iraqis delivered their own MOET style training in Jan 05
- external recognition – ALSG (UK Charity & MOET coordinator) fully recognise the Iraqi courses

### REVIEW OF MOET in IRAQ

Successful delivery of two training missions into Southern Iraq and an International Conference in March 05 demonstrate the MOET in Iraq commitment to provide long term support for Health in Southern Iraq.

MOET must be seen as a major success.

Over 200 women and children alive today, that would otherwise have died.

Many survivors are Marsh Arabs, persecuted under the previous regime.

MOET in Iraq has also worked with Swinfen Charitable Trust (SCT) and Leonard Cheshire Centre for Conflict Recovery. Using the Trojan horse approach, SCT has managed to travel with MOET in Iraq and set up a number of remote telemedicine sites whereby expert medical advice from the developed world can be delivered to the Iraqi consultant.

In January 2005 the first Iraqi led, MOET style, training was carried out in Basrah to 70+ health staff.

# Dealing with Psychological Trauma: Lessons learnt from Operations in the Balkans, Afghanistan and Iraq

Sr Capt Andrew John Gritt (GBR)

Introduction of subject topic: Dealing with Psychological Trauma. I plan to give a short overview of current British Army doctrine in regard to the subject of PTSD as a force protection issue, I shall describe current training initiatives and the importance of this in regard to maintenance of moral and mutual support which I will demonstrate supports unit effectiveness. I will follow on with a description of the TRIM model and its application in the Field concentrating on the value system placed upon it by soldiers and the current RCT that is being run to validate its effectiveness. Drawing upon examples from my own clinical practice within Military Psychiatry and Operational experience I will demonstrate the importance of ensuring robust support measures are put in place for returning veterans and of ensuring through the model that swift intervention in regard to PTSD can support retention and increase moral.

By the end of my presentation participants should have a good understanding of current approaches being utilized by the British Army and the Importance of training and support in dealing with Psychological Trauma.

Currently serving as a Nursing officer within 243 Field Hospital, with responsibility for the Psychological well being of unit personnel, where he hold the rank of Captain.

1984 Registered Mental Nurse: Professional Index Number; 81C1225E.

1987 ENB 998, Teaching and assessing in clinical practice.

1997 Certificate in Systemic Family Therapy - Bristol University

1998 Critical Incident Stress Debriefing Cert - HQ NI Belfast

1999 Instructor Supervisors course - Army School of Training Support

2000 ENB 870, levels 1-2, Understanding and development of research in clinical practice.

2000 ENB 956, Management of violence and aggression.

2001 Foundation Combat Stress Trauma Management cert. Commando Training Centre Royal Marines

2001 ENB A16, Community Mental Health Nursing - University of the West of England

2002 Diploma in Professional Mental Health Nursing - University of the West of England

2002 Advanced Combat Stress Trauma Management certificate. ( T.R.I.M ) Commando Training Centre Royal Marines

2003 Air show Disaster Trauma Management cert. - USAF Fairford (243 Fld Hosp)

2004 Integrated Emergency Management Course Major Incidents Co-ordinating Group

## L'aide humanitaire dentaire en milieu opérationnel

Major Alain OUELLET (CAN)

Le but général de ma présentation qui sera faite sous forme de présentation power point et d'un poster est de d'abord permettre aux participants de mieux visualiser les situations opérationnelles par lesquelles une équipe dentaire militaire peut s'impliquer auprès de la population locale lors d'un déploiement.

La présentation et le poster seront créés à partir de photos prises en milieu opérationnel (Bosnie et Afghanistan). Ces photos illustreront différents thèmes d'aide humanitaire (soins dentaires à la population locale, prévention dentaire, soutien technique apporté à une clinique locale, livraison d'instruments et matériaux dentaires, les relations développées avec les contingents étrangers et les ambassades) avec lesquels j'ai été impliqué lors de ces déploiements.

A la fin de cette présentation, les autres participants pourront mieux concrètement identifier les différentes implications humanitaires ainsi que les limitations clinique et technique d'un dentiste militaire en théâtre d'opération lors de projets d'aide humanitaire.

## BIOGRAPHIE

MAJ ALAIN OUELLET, DMD, ABGD

Maj Ouellet s'est enrôlé dans les Forces Armées Canadiennes en mai 1990. Il a complété un programme de Doctorat en Médecine Dentaire à l'Université Laval, Québec, en avril 1993.

Après avoir gradué en juin 1993, il a été muté comme Officier dentaire au rang de Capitaine, d'abord à la clinique dentaire de la 15<sup>ème</sup> Escadre à Mosse Jaw, en Saskatchewan et ensuite à la clinique du Quartier Général de la Défense Nationale (QGDN) à Ottawa en août 1995. En juillet 1997, il a été muté au peloton dentaire du 2<sup>ème</sup> Ambulance de campagne à Petawawa. Pendant cette affectation, il a eu l'opportunité de participer à un premier déploiement (OP PALLADIUM) Roto 3 en Bosnie, de juin 1998 à janvier 1999. Au retour de la mission et après avoir été promu au rang de Maj, Major Ouellet a occupé le poste de commandant du peloton dentaire toujours au 2<sup>ème</sup> Ambulance de campagne à Petawawa de mai 1999 à juin 2000.

Après avoir été sélectionné pour entreprendre un programme d'études post-graduées de 2 ans en Dentisterie Générale Avancée au sein de l'armée américaine, Maj Ouellet a été muté à Fort Bragg (Caroline du Nord, Etats-Unis) de juin 2000 à juin 2002.

Au moment de graduer de ce programme d'études à l'été 2002, il a publié un article scientifique: "*Detection of occlusal carious lesion*" dans le Journal dentaire de l'Academy of General Dentistry, et a été muté comme Dentiste Généraliste Avancé à la clinique dentaire de la Garnison Valcartier (Québec).

En avril 2003, Maj Ouellet a complété ses examens écrits et oraux de certification d'études graduées du "American Board of General Dentistry" (ABGD). En juin 2003, il a participé à l'entraînement de pré-déploiement de l'OP ATHÉNA et a été déployé comme Officier dentaire de la Roto 1 de février 2004 à août 2004 à Kaboul en Afghanistan. Pendant cette période, Maj Ouellet a été très impliqué dans la réception, l'organisation ainsi que dans la livraison d'aide humanitaire de dons dentaires à quatre cliniques dentaires locales de Kaboul.

Maj Ouellet termine actuellement sa mutation de 3 ans à la Garnison Valcartier et sera affecté en juillet 2005 comme Instructeur chef à l'École du Service Dentaire des Forces Canadiennes (ESDFC) à la base de Borden en Ontario.

## The Canadian Forces Deployed Physiotherapy Capability: Lessons Learned from the Peacekeeping Operations in Bosnia

Major Luc J. Hébert<sup>1,2</sup>, PhD, PT, LCol Peter Rowe<sup>1</sup>, PT

<sup>1</sup>CFMG HQ, D HS Delivery, Physiotherapy, Ottawa (Ontario); <sup>2</sup>Laval University, Quebec (Quebec), Canada

During the peacekeeping mission in Bosnia, the Canadian Forces (CF) provided the full spectrum of physiotherapy (PT) services to its soldiers from Roto6 (February 2000) to Roto13 (March 2004). From a sample of 2,092 cases (mean age, SD, range: 32.9, 7.2, 18-56) and 5,037 consultations, various statistics were compiled. Both the total number of consultations (310 to 974) and the gender distribution (male: 80.8% to 91%, female: 9.0% to 16.4%) were slightly varying between Rotos. The injuries to the lower limb were the single leading cause for PT treatment (41.8%) followed by the spine (28.5%) and the upper limb (21.5%). The most affected joints were the knee (37%) and ankle (34.5%), the shoulder (66%), and the lumbar spine (50%), in the lower limb, upper limb, and spine categories, respectively. Combat arms showed the highest incidence of musculo-skeletal injuries (46.1%). Females had 5.4% more cervical, 2.3 times more sacro-iliac, and about

half the number of elbow lesions than males. Only 30.1% of all cases were acute while 68 % were subacute/chronic. The present results will be explained and discussed as they will be used to develop tailored prevention and rehabilitation programs to better prepare the Canadian troops for combat and enhance operational readiness.

#### Short Biography – Biographie Courte

Major Luc J. Hébert

##### **English**

Major Hébert is a physiotherapist with the Canadian Forces Primary Reserve List. He served with the Regular Forces from 1982 to 1996 where he was appointed to different units in Canada and overseas. After his training as physiotherapist at the Montreal University in 1982, he completed a Master Degree in Biomedical Sciences at the same University in 1989. He also obtained a PhD degree in Experimental Medicine at l'Université Laval in 2001. Major Hébert contributed to a book chapter, published about 16 major papers and more than 50 abstracts. He taught at the Montreal University from 1987 to 1992 and is teaching at the rehabilitation department at L'Université Laval since 1990. He is also adjunct professor at the radiology department of the Faculty of medicine at l'Université Laval where he also occupies the function of Director of research and development.

He is a researcher with the Quebec provincial rehabilitation network. Part of his research focus on the variables that best explain and predict musculo-skeletal (MSK) injuries in the military population as well as factors limiting the performance of soldiers. He also developed a unique expertise in the assessment of upper limb MSK pathologies using three-dimensional motion joint analysis systems and novel imaging procedures such as intervention magnetic resonance imaging techniques. He received several research funds as principal investigator and co-investigator.

Since May 2000, Major Hébert is the National physiotherapy training director for the Canadian Forces Medical Group Headquarter, Health Services delivery.

##### **French**

Le major Hébert est physiothérapeute au sein de la Première Réserve des Services de Santé des Forces canadiennes. Il a été officier physiothérapeute dans la Force régulière de 1982 à 1996, période au cours de laquelle il a occupé différents postes au Canada et outre-mer. Après sa formation de physiothérapeute à l'Université de Montréal en 1982, il a complété à cette même université des études de maîtrise en sciences biomédicales en 1989. Il a aussi complété en mai 2001, des études doctorales en Médecine expérimentale à l'Université Laval. Le major Hébert a collaboré à la publication d'un chapitre de livre, publié une quinzaine de manuscrits et une cinquantaine d'abrégés. Il a été chargé d'enseignement à l'Université de Montréal de 1987 à 1992 et enseigne au département de réadaptation de l'Université Laval depuis 1990. Il est aussi professeur associé au département de radiologie de la Faculté de médecine de L'Université Laval où il cumule également la fonction de Directeur de la Recherche et Développement.

Il est chercheur avec le Réseau provincial de recherche en adaptation-réadaptation du Québec. Ses travaux portent notamment sur l'étude des facteurs explicatifs et prédictifs des pathologies musculo-squelettiques chez les militaires et des facteurs limitant leur performance ainsi qu'au développement d'une expertise de pointe dans l'évaluation des pathologies au membre supérieur avec l'utilisation conjointe de mesures d'analyse tridimensionnelle du mouvement et de systèmes d'imagerie tel que la résonance magnétique d'intervention. Il a obtenu plusieurs subventions à titre de premier demandeur et co-demandeur.

Le major Hébert occupe, depuis mai 2000, le poste de Directeur national de l'entraînement en physiothérapie au sein du Groupe médical des Forces armées canadiennes.

# Comparative analysis between previous civil and later military humanitarian operations in Indonesia following the disaster of theTsunami.

2<sup>nd</sup> Lt. MIGUEL SANCHEZ, M.D. , 2<sup>nd</sup> Lt. RAUL MUÑOZ, M.D. (ESP)

## **Title:**

Comparative analysis between previous civil and later military humanitarian operations in Indonesia following the disaster of theTsunami.

## **Objectives:**

Analysis of the development and evolution of different clinical variables in the crisis and post-crisis of the Tsunami.

## **Methodology:**

Descriptive comparative analysis of WHO items between the Spanish previous civil mission and secondary military mission in the operations theatre. 400 patients were observed for the first civil phase and another 2800 patients for the post-crisis phase managed by the Spanish task force.

## **Results:**

The analysis makes clear a change of direction in both infectious and trauma diseases, as it had been expected in the initial planification. This change focused a “stabilization” in the second phase with growth of the Primary care diseases in BIP countries.

## **Conclusions:**

There is a needing to develop a medium and a long time plan for the post-crisis situation in countries affected.

Identification of critical items in health intelligence was possible, towards the management of disaster situations.

## **Keywords:**

PRIMARY CARE, TSUNAMI, TRAUMA INJURIES, JOINT OPERATIONS, DISASTER

2<sup>nd</sup> Lt SANCHEZ was born in Valladolid in 1966.

Medical Doctor Degree in 1991 in Valladolid University en Family Medical Doctor Degree in 1996.

Emergency Medical Doctor and Civil Defense Management Degree in 1997 and 2001 respectively.

He belongs to the first promotion in the new Spanish Medical Reserve Volunteer Force and was one of the first medical reserve officers to be activated to go to the tsunami disaster in 2005.

He is now working as emergency medical doctor in an emergency office in Castilla-León and develops civil defense and emergency programmes – usually victims in mass disaster.

## U.S. Army Medical Research: More than Combat Casualty Care

CPT Mark G. Hartell, PhD.  
Medical Service Corps, U.S. Army

The U.S. Army Medical Research and Materiel Command (USAMRMC) is the Army's medical materiel developer and logistician. The USAMRMC operates six medical research laboratories and institutes in the United States. These laboratories are centers of excellence in specific areas of biomedical research, staffed by

highly qualified military and civilian scientists and support personnel. The core military research and development program is organized under four Research Area Directorates, which includes the Military Infectious Diseases Research Program. This program, along with others in environmental health, has direct application to current peacekeeping and humanitarian operations. Infectious diseases historically cause more casualties than enemy fire in deployment to tropical regions. Overseas research facilities in Thailand and Kenya provide critically important collaborative efforts with local governments. The products of these programs have been enhanced diagnostic capabilities, novel prophylactic and therapeutic treatment regimes, and topical repellants.

CPT Hartell has over nine years experience in counter-threat technology research including threat detection technologies and therapeutic drug development. Since 1994, CPT Hartell held a number of academic and industrial research positions before accepting a direct commission into the U.S. Army in 2000. CPT Hartell was previously a drug development team leader at the Walter Reed Army Institute of Research and he has procured over \$5.8 million in research funding as either Principal or Associate Investigator. He has served as a senior analytical consultant and subject matter expert for a variety of lead U.S. government agencies. CPT Hartell is the recipient of a number of national and international honors including, most recently, the prestigious U.S. Army Medical Service Corps Award of Excellence in Health Sciences in 2003. His military awards include the Meritorious Service Medal, the National Defense Service Medal, and the Global War on Terrorism Service Medal.

## From assistance to war: Operational Medicine defined

Maj Douglas W. Rink, Maj Steven Currier, Col Charles Beadling (USA)

By definition, Operational Medicine is the ability to provide treatment within a resource limited, austere or hostile environment, which is dominated by unpredictable patient acuity, volume, and external events. An austere environment is one that is isolated by limited transportation and communication, with no supporting infrastructure. This can be due to geography, such as in the arctic or a desert. It could also be the result of a significant natural disaster, like the tsunami that struck Indonesia December 2004. A hostile environment is one in which significant physical threats are present. This could be during any war, following a terrorist attack with chemical agents, or after a disaster such as Chernobyl.

Whether in the role of humanitarian assistance, peacekeeping mission, or full-scale war, the medical community's impact on the situation is directly related to its ability to leverage its limited resources under this paradigm. In this world, initial care is often provided where patients may have serious illness or injury masquerading as a benign process. This can be complicated by delays in evacuation to a higher level of care or the need to return some soldiers to duty due to mission or unit defense requirements. Access to many ancillary tests does not exist. Therefore, the need for immediate interventions before an exact diagnosis is made can lead to treatment plans that may be perceived as less than "ideal." Within this paradigm, the common denominator is the process regarding determination of condition and delivery of care irrespective of the "title of the mission." A proposed Operational Medicine decision algorithm will be discussed.

## Chemical Attack or Nature's attack

Lt Col Grant, Joylyn M (USA)

- Comparison of dermatological reactions from chemical, neurological biological warfare vs naturally occurring irritants and poisons.
- Photographs of plants and animals that cause dermatologic reactions and systemic symptoms that mimic the effects of chemical warfare attacks.

- Descriptions of plants and animals that cause signs and symptoms similar to Chem, bio, neuro warfare.
- Maps identifying regions where specific plants and animals reside description of treatments available for physical reactions to naturally occurring irritants and poisons.
- Distinguish between signs and symptoms of a chemical, biological, neurological warfare attack versus signs of conditions caused by contact with indigenous plants and local insects, arachnids and snakes.
- Identify regions of the world where various plants and animals reside that may cause signs and symptoms similar to chemical, biological, neurological warfare attacks.
- Define treatment methods for symptoms caused by nature's chemical, biological and neurological warfare imitators.

MS, RN, Family nurse practitioner in the Air Force Reserves. Outpatient care in ambulatory clinic at Bolling Air Force Base. Civilian positions-Nurse practitioner for GI Dr, physicals for colonoscopy screening, managing Hepatitis C patients on Injected Peg-Intron and rebetol treatments. Evaluating lab results and adjusting medication as needed. Women's health care at Dewitt hospital, outpatient clinic. Cervical and breast cancer screening, birth control management, osteoporosis prevention and health education.

She has received extensive education on research methods and evidence based practice. During her 20 years as a nurse in the Air Force Reserve, she has received extensive education on chemical warfare protection, detection, and treatment. She has participated in and directed multiple exercises for a chemical attack environment. She is expected to evaluate, diagnose and treat multiple medical conditions as a nurse practitioner. These experiences qualify her to research and report on signs and symptoms of nature's chemical attacks versus man made chemical warfare attacks.

## Terrorist Attack in Peace Keeping Operation in KERBALA, IRAQ

Brig. Gen. Prof. Stoyan TONEV, MD, PhD; Prof. Kamen KANEV, MD, PhD  
Prof. Dimitar LEKOV, MD, DSc. (BGR)

One of the main tasks of the Bulgarian military unit is to participate in humanitarian, rescue and peace keeping operations abroad. The aim of this study is to investigate the Bulgarian experience of the medical support and overall and medical losses in peacekeeping operations in conditions of terrorist attack. An analysis was performed of the provided medical care, triage of the casualties and evacuation to the 4<sup>th</sup> level (Role 4) after the terrorist attack on 27.12.2003 against the Bulgarian military base "India" in Iraq. The structure of casualties was evaluated up to 67 affected people, i.e. 30% of the personnel present at that time in the base. Five of them (9%) is irreversible losses. From the total number of medical losses, 98, 4% were wounded and 1, 6% were in extreme psychological stress. Moderately serious injuries (T-2 according to NATO standards) were prevailing (65, 3%); badly wounded (T-1 according to NATO standards) were 26, 9%; the other 7, 9% were walking cases (T- 3 according to NATO standards). Most of the injured had multiple traumas affecting the head or the spine – 65, 4%. The combined traumas of head, spine and extremities were 57, 7%, while the combined trauma of head, spine and trunk – 7, 7%.

Analysis and conclusions of the medical support in the bombing attack in Kerbala show that Bulgarian military doctors are trained to manage well in terrorist attack, and the gained experience will contribute to elaborate models of medical support of Bulgarian contingents participating in peacekeeping operations.

LtCol.(r), Assoc.Prof. Kamen Petrov Kanev, MD, PhD  
Military Medical Academy - Clinic of Intensive Therapy of Internal Diseases  
3, "St. Georgy Sofiisky" str., 1606, Sofia, Bulgaria

- Date of birth - 18 June 1952

- Investigational Site Address Military Medical Academy Clinic of Emergency and Intensive Therapy, Office Phone +359 2 922 5678; +359 2 922 5363; Fax +359 2 922 29 41; +359 2 952 65 36

University Degree / Medical School Level :

- 1979 - Graduated MD from the Medical Academy- Sofia
- 1985 – PhD in Military Medical Academy – Sofia
- 2003 – Graduated MD from the UNWE - Sofia

Specialties .:

- 1986 Gained specialty - Medical and Sanitary Defense
- 1988 Gained specialty - Military Toxicology
- 1991 Gained specialty - Internal Diseases
- 1998 Gained specialty - Toxicology
- 2004 Gained specialty - Emergency medicine

Previous Job Position:

- 1980-1981 - Military doctor in Radomir, Bulgaria
- 1981-1985 - Post-graduate student in Medical Defense, Military Toxicology, Radiology in Higher Military Medical Institute, PhD
- 1986 - Deputy-head of Department of Medical Control at Ministry of Defense
- 1988 - Head of Department of Medical Control at Ministry of Defense
- 1990 - Assoc. Prof. in Toxicology
- 1992 - Head of I Dept. of Internal Diseases, "Lozenec" Clinical Base
- 1994 - Deputy-director of Clinical Hospital "Lozenec"
- 2002 - Head of Department of Public Health at District Health Center-Sofia
- 2003 - Assoc. Prof, in the Faculty of Emergency and Intensive Medicine, Military Medical Academy- Sofia.
- 2004 Chief of Chair of “Disaster Medicine and Toxicology

Current Job Position:

- Chief of Chair of “Disaster Medicine and Toxicology”
- Associate Professor in Chair and Clinic of Emergency and Intensive Therapy;

Publications:

- Over 90 scientific articles published in Bulgarian and foreign journals  
2 books, 3 handbooks, scientific articles published in Bulgarian and foreign journals
- Participations in international and national congresses
- Secretary of the Specialized Scientific Council of Military Medicine in Bulgaria
- Secretary of the scientific journal “Military Medicine”
- Vice president of National Bulgarian Association for Reserve Officers

Experience in Clinical trials - Yes,

Languages: English, Russian, German

Computer skills: MS Word, Excell, Power Point, Access

## An unusual preoperative finding.

Newton Ede, Matthew P./Dr/Army (TA)/RAMC/207 Fd Hosp (GBR)

### **ABSTRACT**

A 22 year old male attended a preoperative assessment clinic in preparation for an elective laparoscopic cholecystectomy. A subtle clinical sign was elicited by the examining Pre-Registration House Officer. Appropriate investigation followed, leading to diagnosis of a significant cardiac abnormality. Open cardiac surgery followed swiftly, leading to a complete recovery. A year after initial presentation the cholecystectomy was performed without complication.

Had this cardiac anomaly gone undetected in the clinic, there is a significant possibility that the myocardial demands of an abdominal procedure could have proved catastrophic. This case illustrates the need for meticulous pre-operative assessment in a culture where increasing numbers of assessments are being performed by non-medical staff.

Senior House Officer in Ear Nose and Throat Surgery (Paediatric)

As a Junior Surgical Doctor, he performed a great number of pre-operative assessments. This case is very relevant to his peer group who are increasingly expected to “sign-off” on other people's assessments, in order to speed the process of along.

He has previously presented at The British Trauma Society and The Tri-Services Surgical Meeting (Keogh)

## Opération BERYX – Identification des victimes de la catastrophe du tsunami – Thaïlande

SCHULIAR Yves (FRA)

médecin en chef, sous-directeur, Institut de recherche criminelle de la Gendarmerie.

JOLY Guy (FRA)

Chirurgien dentiste en chef de réserve. Attaché au service de Chirurgie Maxillo-faciale de l'hôpital d'instruction des Armées, BEGIN.

Dans le cadre de la catastrophe (Tsunami) survenue en Asie du sud-est le 26 décembre 2004, la mise sur pied de l'unité nationale d'identification des victimes de catastrophe (UNIVC) est décidée.

Le 28 décembre 2004, 8 spécialistes de l'Institut de recherche criminelle de la gendarmerie nationale (IRCGN) partent pour la Thaïlande.

Dès leur arrivée à Phuket, ce premier élément se rend au Temple de Wat Yan Yao où les corps d'occidentaux (plus de 2000) seraient regroupés. Arrivé sur site, le spectacle est hallucinant : des centaines de corps sont entreposés en plein soleil sans aucune mesure de conservation. Familles de victimes, secouristes, journalistes, riverains, volontaires déambulent dans cette “morgue” improvisée !

L'équipe se rend immédiatement compte qu'elle n'est pas en mesure de remplir d'une manière isolée une mission d'identification dans de telles conditions. Elle décide alors de se rapprocher des autres équipes présentes. Il est mis en place, dans des délais satisfaisants, une structure internationale en coordination avec les autorités thaïlandaises qui adopte les procédures d'identification préconisées par Interpol et obtient l'installation de containers réfrigérés comme morgue sur les 3 sites principaux où sont regroupés les corps. Six cents spécialistes en identification de plus de trente nations sont présentes en Thaïlande pendant les mois de janvier et février 2005. Un centre international de management des opérations d'identification est créé à Phuket. Il aura pour mission principale de collecter les données post mortem fournies par l'examen des corps et les données ante mortem obtenues des familles et des praticiens traitants afin de les comparer et de prononcer les identifications.

Rapidement renforcé par 9 policiers et par plusieurs médecins légistes de réserve et dentistes (d'active et de réserve) du service de santé des armées, l'élément précurseur de l'IRCGN s'organise et obtient l'autorisation d'installer une chaîne d'examen post mortem française (dans plusieurs tentes gonflables envoyées par l'intermédiaire du gouvernement français)

Quelques jours plus tard, la chaîne française est opérationnelle. Elle permet à l'équipe française de pouvoir réellement commencer son travail d'examen post mortem. Cette structure permet de surcroît à d'autres équipes de bénéficier de locaux techniques.

Au bout de 3 semaines, le site de Wat Yan Yao, sans doute en raison de son éloignement de Phuket, est fermé. L'activité est transférée sur le temple de Tcha Tcha Chai où 3 hôpitaux de campagne sont déployés par les norvégiens. Sur ce site, ce sont 12 chaînes médico-légales qui sont en mesure de travailler simultanément.

Dès le début de la crise, une cellule ante mortem composée de policiers et de gendarmes issues des mêmes services que ceux déplacés en Thaïlande est montée à PARIS. Celle-ci permet de confirmer le nombre de français disparus et se charge de transmettre toutes les informations obtenues auprès des familles de victimes au centre de coordination international de Phuket où sont effectuées les comparaisons entre les données ante mortem et post mortem.

Cette affaire, complexe sur le plan technique médico-légal a été également délicate à gérer sur le plan logistique. Il est clair que le partenariat Gendarmerie – Service de Santé (Active – Réserve) a été l'élément primordial, incontournable pour une gestion adaptée de la situation.

Cette mission au caractère exceptionnel permettra, à son épilogue de retirer des enseignements très riches qui, sans aucun doute amélioreront l'efficacité des différentes équipes d'identification lors de futures catastrophes.

## Thai Tsunami, Forensic Aspects

Peter J. T. Knudsen, Surg Cdr RDNR (DNK)

Deputy Chief Forensic Pathologist, Associate professor of Forensic Medicine  
University of Southern Denmark

26th December 2004 the coastal areas of the countries around the Indian Ocean were hit by a giant wave caused by an earthquake – a tsunami. Initial reports did not cause any Danish precautions, but the next day the number of Danish missing persons rose rapidly and soon reached over 200. Norway has experience and equipment, Denmark sent only an advance group, so the two nations linked up under Norwegian leadership. The overall responsibility was with Thailand, assisted by Australia. Local jurisdiction was initially shared by the local police and the Central Institute of Forensic Science in Bangkok. The requirements for identification were: Fingerprints, Dental information or DNA. Status today (1<sup>st</sup> March 2005) as for Danish victims: 47 missing (2 in Sri Lanka), 27 identified leaving 20 unaccounted for.

Curriculum vitae of Peter J. T. Knudsen

Born 9th January 1948

Graduated 1975 University of Aarhus.

Qualified as a general practitioner March 1980

Specialist in morbid anatomy and histopathology 1<sup>st</sup> March 1986 (= Board certification in Surgical Pathology).

Certified in Forensic Pathology and Clinical Forensic Medicine 1<sup>st</sup> October 2004

Clinical appointments and national service 1<sup>st</sup> July 1975 – 31<sup>st</sup> March 1980.

Appointments in Pathological Anatomy 1<sup>st</sup> April 1980 – 31<sup>st</sup> March 1986

Assistant Professor of Forensic Medicine, Institute of Forensic Medicine, University of Aarhus 1<sup>st</sup> April 1986 – 31<sup>st</sup> March 1990.

1<sup>st</sup> April 1990 to 31<sup>st</sup> April 1996 appointments in Pathological Anatomy, 1<sup>st</sup> May 1996 Acting Consultant Pathologist, Institute of Pathology, Aarhus University Hospital.

1<sup>st</sup> August 1996 Associate Professor of (US)/Senior Lecturer in (UK) Forensic Medicine and Deputy Chief Forensic Pathologist, Institute of Forensic Medicine, University of Southern Denmark.

1<sup>st</sup> January 1982 commissioned into the Defence Medical Corps, Royal Danish Navy Reserve, as surgeon sublieutenant, 1<sup>st</sup> October 1983 surgeon lieutenant, 1<sup>st</sup> November 1988 surgeon lieutenant commander, 1<sup>st</sup> November 1993 surgeon commander, 15<sup>th</sup> November 2001 surgeon commander senior grade.

Completed the basic and the advanced reserve officers' course, including reserve officers' Staff course.

Military assignment as Deputy Command Surgeon, ADM DANFLEET, including Medical Liaison Officer/CINCGERFLEET  
Member of the Reserve Officers Committee of the Medical Corps and of the Navy  
Advisor in wound ballistics to the Defence and the Police.  
Senior Pathologist, The Identification Group of the National Commissioner of Police  
Chairman of NATO/RTO Task group on Behind Armour Blunt Trauma.  
Author of numerous scientific papers on normal anatomy, pathological anatomy and forensic medicine, particularly on wound ballistics.

Served on the Board of the Reserve Officers Association of Denmark, member of the Board of the Danish Society for Military Medicine and the Danish Society for Forensic Medicine.  
Decorated with the Medal of Honour of the Reserve Officers Association of Denmark and the CIOMR Pro Meritis award

Married to Anne-Marie, two daughters: Astrid and Nanna.  
President of the CIOMR 2002-4.  
Interests: Classical music and old cars, preferably pre-WW2.

## « MISTRAL »

### Bâtiment de projection et de commandement Plate-forme navale de soutien médical

Médecin en Chef (R) C. LE ROUX (FRA)

La Marine française a mis en chantier en 2002 deux bâtiments de guerre polyvalents de plus de 20 000 tonnes, porte-hélicoptères de conception originale, fondée sur les besoins opérationnels identifiés à la fin des années 90 par l'Etat-major des Armées.

Définis comme Bâtiments de Projection et de Commandement (BPC) ils seront admis au service actif en 2005 et 2006 sous les noms de MISTRAL et de TONNERRE.

Dotés de capacités aéromobiles, amphibies, de commandement et d'appui sanitaire renforcé, ils seront adaptés à un soutien santé de rôle 3, selon la définition OTAN, dans le cadre de missions de projection de force.

La définition de leurs caractéristiques s'est appuyée sur les bases du concept national des opérations amphibies : à savoir la projection et le débarquement d'une force terrestre de 1 400 personnes avec une autonomie logistique impliquant des moyens sanitaires et thérapeutiques de rôle 3, au mouillage ou à la mer.

Neuf cents mètres carrés consacrés aux locaux hospitaliers, un grand local d'imagerie pouvant accueillir un scanner, un équipement élaboré de télémédecine, ainsi que la possibilité d'adjoindre des équipements techniques modulaires dans le hangar situé au même niveau que l'hôpital lui-même assurent des capacités médico-chirurgicales étendues. Un déploiement de longue durée sera possible, autorisé par une disponibilité technique théorique de trois cent cinquante jours par an.

Ce type de bâtiment présente une alternative aux hôpitaux mobiles de campagne et aussi aux navires hôpitaux et même aux MRV (Multi Role Vessels) réalisés par d'autres marines. Il est également susceptible d'être intégré dans une mission embarquée multinationale menée selon le concept de « sea-basing ».

Abstract :

MISTRAL : a new medical platform for tri-service operations. The new french LHD, Mistral and Tonnerre, will be commissioned in 2005 and 2006. These sister ships, with upgraded aviation, amphibious, command and medical facility, will support a maritime expeditionary force with medical capability up to role 3. New functions will be implemented, including digital radiology, telemedicine, and will comply with current bio-engineering standards. Thus they will be able to join an international task-force, providing « sea-basing ».

### **Biographie du Médecin en Chef (R) C. LE ROUX**

Gastro-Entérologue, Radiologue, Ancien Chargé d'Enseignement clinique à la Faculté de Médecine Paris Ouest, le Docteur Christian LE ROUX est Chef de Service à l'Hôpital du Vésinet.

Vice Président (Mer) de l'Union Nationale des Médecins de Réserve, il est Auditeur de l'Institut des Hautes Etudes de Défense Nationale et occupe depuis 1987 le poste de Conseiller Santé auprès du Commandant du Centre d'Instruction des Réserves de la Marine à Paris. Il a participé à l'organisations des congrès de la CIOMR en France : Paris en 1991 et Strasbourg en 2002. Il a été représentant permanent de la Délégation française aux sessions de la CIOMR sans interruption de 1995 à 2004. Vice Président du Comité F.A.C.

Médaille d'Honneur du Service de Santé des Armées. Chevalier de la Légion d'Honneur.

## Checking the functioning of segments of the civil protection and disaster relief system at the local level

Lt Primož RUS (SLO)

### PURPOSE

The aim of the exercise was to check the functioning of the individual constituent parts of the civil protection and disaster relief (CPDR) system in accordance with the CPDR plan, and to present all CPDR forces and resources at the Vrhnika municipality (a smaller town with a population of 21,000).

### OBJECTIVES

The underlying objective was to determine the current level of preparedness and proficiency of individual organised CPDR units in the event of a devastating earthquake, the statistically second most likely disaster in Slovenia.

The second objective was to present the CPDR plan to the general public, present the equipment of CPDR units available at the local level, and show the units' know-how and skills with respect to the local CPDR plan in the event of a devastating earthquake.

The third objective was to check the consistency of plans made by the local civil protection and disaster relief outfit, and the ability of its members to coordinate the work of individual CPDR units, as well as the effectiveness of activation of CPDR units based on the monitoring and warning system.

### METHODS

We used the method of simulating a devastating earthquake according to the most likely scenario:

- Selecting the most sensitive sites (schools, kindergartens, shopping centres, industrial facilities, high-risk sites due to dangerous substances).
- We measured the units' preparedness and response with the level of response to the call for activation of CPDR teams, and timed the difference between the planned and actual response time of individual CPDR units with the appropriate radio communications system.
- The assessment of the teams' training was carried out in accordance with the training programme for CPDR units (scenario of possible situations and injuries with the use of appropriate resources and in accordance with enacted CPDR procedures). External monitors and judges appointed by the regional and state civil protection headquarters carried out the assessment and examined the concordance of CPDR activities with the existing local CPDR plan in the event of an earthquake.
- Effectiveness of senior staff coordination was assessed based on self-evaluation, mutual assessment and external evaluation.

## RESULTS

The exercise has shown a high level of unit preparedness, with CPDR unit response at 98%. This shows that members of organised CPDR outfits are highly motivated. The units also showed a high level of proficiency in the use of CPDR resources, and the exercise demonstrated good cooperation between voluntary and professional teams.

It was established with the use of the radio communications system that some units did not respond fully; in individual cases the use of CPDR resources was inadequate or non-rational, and in one case the appropriate personal protection equipment was not used. Results were somewhat worse in the coordination and management of the entire CPDR system (imperfect horizontal and vertical coordination).

The public relations system was inadequately planned and there was no organised public communications service (establishing the identity of the dead, looking for missing persons...). The centre for earthquake victims lacked an organised psychological support and treatment service.

## CONCLUSION

The exercise was designed so that the earthquake simulation was as realistic as possible. It was carried out successfully and well coordinated considering the number of participants. The public response was positive, as several thousand locals and accidental visitors watched the exercise. The units completed the planned tasks mostly with excellence. The exercise objectives were achieved and the results were in line with expectations. The shortcomings also provided a positive result, for they were pinpointed and serve as a basis for improvements to the CPDR system and all of its segments.

## The evolution of emergency medicine in recent Canadian deployments

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With advances and increasing sophistication in medicine we must start to reevaluate how we manage patients in a military operational setting. As the various branches of Canadian medicine become more specialized, the management of casualties in the military setting must also keep pace. The Canadian trained Family Practitioner/General Practitioner within the military may not have all the tools, training or experience to adequately manage all types of patient presentations in operational theatres. Within Canada and many parts of the world, the specialty of Emergency Medicine has flourished. The Emergency Medicine specialist or emergentologist has been trained to manage the complexities of resuscitation, act at the consultant level in the immediate management of critically unwell traumatized and medical patients. They have skills in areas of military significance such as: transport medicine, EMS, CBRN, disaster medicine.

Soldiers on current deployment deserve consultant or attending level of care by physicians who have been trained in managing the sick and ambulatory care patients. They deserve clinicians that have comfort dealing with the chaos of managing critically unwell patients, as these clinicians face these challenges daily as part of their regular work outside of a war zone. The Emergentologist can complement existing medical resources and ensure quality medical care in operational theatres.

The awareness that terrorists can misuse the transport and storage of hazardous substances to disrupt society :

The importance to make an inventory of critical locations and to secure these.

Cdr Stef STIENSTRA (NLD)

## INTRODUCTION

After 9-11 several governments realised the vulnerability towards creative asymmetric attacks. Having made an inventory of vulnerable places in the country we realise how dependent the modern society is from new essential infrastructures. Not only government organisations depend on public infrastructures, but also industry. On the premises of industrial plants we can often find hazardous substances, which could be dangerous for society, when the proper care is interrupted. During transport of these substances there should be a continuous awareness of the potential threat of unexpected attack.

## STUDY DESIGN

An inventory was made of the present critical infrastructure, industry and transport routes for dangerous goods. Also the computer and telephone cable network in the country was assessed. For several disaster scenarios the theoretical effects of terrorist attack on industrial complexes were evaluated.

## RESULTS AND DISCUSSION

It is amazing that the exact position of critical communication lines in the ground is not always present. Sometimes contractors have changed the routing of infrastructure just for pragmatic reasons. It is of utmost importance that government organisations are aware of their critical infrastructures for computer and telephone networks, which have to be used by police, fire department and other organisations, which have to respond in a terrorist attack.

Due to the presence of several dangerous goods in the world, e.g. on industrial complexes, it is thinkable that with a minor action, a major reaction can follow with a huge impact on society.

## CONCLUSION

Due to the use of computer networks and the use of the same infrastructure for several applications, the vulnerability of the modern society has increased dramatically. Unexpected, long lasting effects can be the results of a minor bomb attack due to an unforeseen knock-on effect, which nobody realises. Industry should be aware of this in making disaster plans.

## KEY WORDS

Industrial dangerous goods, disaster plan, terrorism, transport, infrastructure, knock-on effect.  
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In parallel he is commander of the reserve of the Royal Dutch Navy and consulting on several levels on bioweapon defence and bioterrorism risks. He gives all over the world lectures for military schools. In the time left over and during waiting times at airports he writes articles for several professional magazines.