



**International Commission
for Mountain Emergency Medicine
ICAR MEDCOM**

**FALL MEETING 2009
ZERMATT, SWITZERLAND
23 – 26TH SEPTEMBER**

**Report to the Mountain Rescue Association
By Ken Zafren, MD, Vice President of the ICAR MEDCOM
Representing the MRA – United States**

INTRODUCTION

The ICAR Medical Commission is one of the 4 commissions – Air Rescue, Avalanche, Medical and Terrestrial Rescue - that comprise ICAR, the International Commission for Alpine Rescue. The proper name for ICAR is CISA-IKAR, which is the acronym of its French and German names. Most of the member organizations of the ICAR are national, or in some cases, regional rescue organizations. These organizations send representatives to the different commissions. The 4 commissions meet together annually in early Fall, in a European country. This year's meeting was in Zermatt, Switzerland at the base of the Matterhorn. It was organized by the regional rescue organization, the Valais Mountain Rescue Service.

It has been my privilege to represent the Mountain Rescue Association in the ICAR MEDCOM for the last 14 years. The goal of our delegation to the 4 commissions of ICAR is to share knowledge and experience with the rest of the world. We contribute our expertise and we bring back a wealth of information and ideas from experts from other parts of the world.

The formal work of the ICAR MEDCOM is to develop guidelines for the medical aspects of mountain rescue. Past guidelines that have been very influential worldwide include a recommendation for the use of vacuum mattresses in mountain rescue and an algorithm for medical treatment of avalanche victims. All of the guidelines are freely available as downloadable PDF files on the ICAR web site. To insure quality, in the last several years we have required that every guideline be published in a peer-reviewed medical journal before it can be released.

The ICAR MEDCOM has a sister organization, the UIAA MEDCOM (Medical Commission of the International Association of Climbing Federations). The members of the UIAA MEDCOM represent national climbing federations. Like ICAR, the UIAA has a number of different commissions. The UIAA MEDCOM also publishes recommendations (guidelines), but is concerned with general mountain medicine, including preventive medicine and expedition medicine rather than mountain rescue medicine, which is the province of the ICAR MEDCOM.

MEMBERS

This year's meeting included 48 members from 24 countries and 2 observers, one of whom was Skeet Glatterer, Chairman of the MRA Medical Committee. Tim Kovacs, a former President of the MRA, is the alternate representative from the MRA. Tim has been an active participant in the work of the commission. Unfortunately, Tim was only able to attend a portion of the meeting of the MEDCOM. At the last minute he had to take over the job of representing the MRA in the Air Rescue Commission. Hermann Brugger, from Italy, who has been the President of the commission for 8 years, prepared to hand the reins over to Fidel Elsensohn from Austria, who assumed the presidency at the end of the meeting.

SPRING MEETING 2009

In addition to the Fall meeting, the MEDCOM also holds an annual Spring meeting. This is a working meeting with a much smaller attendance than in the Fall. Unfortunately, the United States representatives are seldom able to manage 2 trips to Europe in 1 year and almost never can attend. The 2009 Spring meeting took place in Bansko, Bulgaria, 150 km south of Bulgaria's capital, Sofia, from 25 to 29 March, 2009. Bansko is the largest and best-known ski resort in Bulgaria. The meeting was hosted by the Planinska Spasitelna Sluzba, the Bulgarian Mountain Rescue. There were 15 participants at the meeting in Bansko. They discussed several of the papers in progress and started on a new one.

SPECIALTY COURSE IN NEPAL

From 24-28 May the ICAR MEDCOM conducted the second Specialty Course in Mountain Emergency Medicine in Kathmandu, Nepal in cooperation with the Himalayan Rescue Association. The first course was held in 2008, in Argentina. I was the lead planner for the course. However, at a fairly late stage I found out I could not attend. This was due to unavoidable absences from work of two of my partners in my emergency medicine group in Anchorage. The course was well organized by Prakash Adhikari, director of the HRA.

The course covered practical and theoretical topics in mountain emergency medicine using lectures and hands-on sessions. It met the requirements of the ICAR Specialty Course in Mountain Emergency Medicine except for those of the optional air rescue module. The ICAR Specialty Course is one of the components of the International Diploma of Mountain Medicine that was developed by the UIAA MEDCOM, the ICAR MEDCOM and the ISMM (International Society of Mountain Medicine).

There were 9 instructors, including 8 physician members of the commission and 1 rescue specialist. The course was held in the Centre of Kathmandu at the Pasang Lamu Mountaineering Federation with an artificial climbing wall and also on a rock face in the Shivapuri National Park. In addition, there was half-day session at the Tribhuvan International Airport for air rescue training.

Of the 34 participants 9 were doctors. The other 25 were rescuers, paramedics and mountaineering and trekking guides. Of the 15 high altitude mountaineers in the group, 6 had reached the summit of Mt. Everest. Among them were 3 members of the National Women's Expedition to Mt. Everest in 2008. The instructors reported that the students were highly motivated and very enthusiastic. At the end of the week the 34 participants took a written examination and received a certification of attendance. The instructors estimate that about two thirds of the participants will be able to carry out the main goal of the course and act as basic or advanced instructors to teach what they learned to others in Nepal.

With the financial support of ICAR and private sponsors, the instructors shipped a container from Europe to Kathmandu with about \$15,000 worth of teaching materials, medical kits and rescue equipment such as litters, vacuum mattresses and ropes. All of this material was donated to the HRA.

The Himalayan Rescue Association is a nonprofit organization founded in 1973. The HRA runs 3 seasonal aid posts in the Himalayas. These are located at Pheriche in the Khumbu (Everest) Region and Manang in the Annapurna region, as well as at Everest Base Camp. The two main posts are dedicated to the prevention of high altitude illness through education of trekkers and to treatment of altitude illness and other medical problems. The posts are staffed by volunteer doctors from North America, Europe, Australia and New Zealand. A third post in the Everest Region, at Machermo, is run by the International Porter Protection Group and is also staffed by volunteer doctors.

This leaves most of the mountain areas of Nepal without any rescue services. The network of small hospitals and clinics in these areas can provide basic emergency medical care under some circumstances, but not if the patient is too ill or injured to be carried to the facility. Helicopters are available for foreigners but almost never for Nepali people who cannot afford the expense involved.

The HRA would be willing to enlarge its areas of operation within Nepal if suitable resources were available. However the establishment of a true rescue organization is still far in the future. The instructors observed that the Nepali participants in the course displayed great self-confidence and were hard workers. They were very proud of their climbing abilities and achievements. The instructors predict that the development of an efficient rescue organization will not take as long as it did in Europe.

INTERNATIONAL SOCIETY OF MOUNTAIN MEDICINE (ISMM)

Many of our papers are published in *High Altitude Medicine and Biology (HAMB)*, the journal of the ISMM. Beginning January 2009, *HAMB* has been online only and no longer has a print version. We have introduced "Clinician's Corner" as a new section in the Journal where clinical papers should be considered for peer review and publication.

The next ISMM meeting will be in Arequipa, Peru in August 2010. ICAR Medcom was asked by the original organizer to provide an additional rescue module in conjunction with this meeting. This now appears doubtful. However, there will be a session on mountain rescue. Several members of the ICAR MEDCOM will be attending the meeting and will give talks. In addition, we plan to hold a joint session of the ISMM, UIAA MEDCOM and ICAR MEDCOM at this meeting to continue cooperation among the major organizations concerned with mountain medicine.

CoSTR 2010

ILCOR (International Committee on Resuscitation) is the international umbrella organization that publishes guidelines for resuscitation and advanced life support. The American Heart Association is a major member organization of ILCOR. The latest revision, which will be published in 2010, is nearing completion. Jeff Boyd, a member of the ICAR MEDCOM representing Parks Canada, and Hermann Brugger have been invited by the Evaluation Committee of ILCOR to create a worksheet for the on-site treatment of avalanche victims. The worksheet is now posted on the Internet for general discussion. It can be downloaded from: <http://www.americanheart.org/presenter.jhtml?identifier=3065167>. The results will be presented at the ILCOR Consensus on Science with Treatment Recommendations (CoSTR) in Dallas in 2010 prior to revision and review by the ILCOR Editorial Board. The final version will be approved for publication at the end of 2010.

European Academy (EURAC) Institute of Mountain Emergency Medicine, Bolzano (Bozen), Italy

Hermann Brugger announced that a new Research Institute for Mountain Emergency Medicine will be established by the European Academy in Bozen/Bolzano in South Tyrol. Hermann has been asked to develop this unique institute by the European Academy. He plans to limit his practice of medicine in Bruneck in order to devote some of his time to this task.

The institute will support and carry out scientific projects dealing with medical emergencies in mountain and remote areas. It will be a service organization promoting science in mountain emergency medicine and will collaborate with the Innsbruck Medical University, local rescue organizations and the Italian National Health Service. A series of clinical questions has been proposed for epidemiological, clinical and experimental investigations, but the institute will also consider questions from outside sources. The institute plans to collaborate closely with ICAR MEDCOM. It will have the capability to provide logistic, financial and scientific support.

RECENTLY PUBLISHED PAPERS

Sumann G, Paal P, Mair P, Ellerton J, Dahlberg T, Zen-Ruffinen G, Zafren K, Brugger H. **Fluid management in traumatic shock; a practical approach for mountain rescue. Official recommendations of the International Commission for Mountain Emergency Medicine (ICAR MEDCOM).** High Alt Med Biol 2009 10:7-15.

Ellerton J. **Prehospital use of ketamine in mountain rescue.** Emerg Med J. 2009; 10:760-1.
(not an official recommendation of ICAR MEDCOM)

Ellerton J, Zuljan I, Agazzi G, Boyd JJ. **Eye problems in mountain and remote areas: prevention and onsite treatment – official recommendations of the International Commission for Mountain Emergency Medicine (ICAR MEDCOM).** Wilderness Environ Med 2009; 20:169-175.

Elsensohn F, Niederklapfer T, Ellerton J, Swangard M, Brugger H, Paal P. **Current status of medical training in mountain rescue in America and Europe.** High Alt Med Biol 2009; 10:195-200.

PAPERS SUBMITTED OR IN PRESS

Ellerton J, Brugger H, Tomazin I, Paal P. **Immobilization and splintage in organized rescue** High Alt Med Biol, *In press.*

Elsensohn F, Soteras I, Paal P, Reisten O, Ellerton J, Brugger H. **Contents of mountain rescue doctor's rucksack.** *Completed but not yet submitted.*

Members are encouraged to translate and propagate the papers – permission from publisher is usually straightforward.

PAPERS IN PREPARATION

Boyd J, Brugger H. **Statement on the process in developing papers.** *The final draft was presented and reviewed. A final version will be circulated on the list server.*

Elsensohn F, Zenruffinen G, Ellerton J, Sumann G, Zafren K, Nerin MA, Brugger H. **Assessment of casualties in the mountains.** *The final draft was presented and extensively reviewed. A final version will be circulated on the list server.*

Reisten O, Soteras I, Wiget U. **A Modular First Aid Kit for Alpinists, Mountain Guides and Alpinist Physicians.** This paper is an updated version of an older paper from 20 years ago. It will be a joint effort of the ICAR MEDCOM, UIAA MEDCOM and ISMM. *It was reviewed. A draft, based on the review will be presented at the Spring meeting in 2010 and then discussed at the joint meeting of all 3 organizations that will take place in Arequipa, Peru in August 2010. It should be finalized at the Fall meeting in 2010*

Tomazin I, Ellerton J, Soteras I, Reisten O, Ledwidge M, Halvorsen D, Avbelj M, Biner G.
Recommended Standards in Helicopter Emergency Medical Services (HEMS) in Mountain Rescue (in co-operation with air rescue commission). *The paper was extensively reviewed and agreed by both commissions. A final version will be circulated on the list server prior to submission to a journal.*

Teale S, Milani M, Paal P, Forster H. **Diagnosis of death in a mountain rescue situation by medical and non-medical personnel.** *The concept and aims of the paper were presented and discussed.*

SHORT COMMUNICATIONS

Peter Mair. Trauma registry

Peter Mair presented his proposed mountain rescue trauma registry. This is intended as a quality control instrument as well as a research tool. It will be focused on seriously injured patients and will use simple prehospital data as well as hospital data.

FORTHCOMING EVENTS

2010

April 18-25 ICAR MEDCOM Spring meeting (Spitsbergen, Norway)
August 8-12 International Society of Mountain Medicine (Arequipa, Peru)
October ICAR MEDCOM Fall meeting & General Assembly (Slovakia)

2011

ICAR MEDCOM spring meeting (Germany?)
International Hypothermia Symposium (Tromso, Norway)
ICAR Fall meeting (Greece?)

INTERNATIONAL HYPOTHERMIA CONFERENCE (ZERMATT, SWITZERLAND)

The Second International Hypothermia Conference was held in Zermatt during the ICAR MedCom meeting. The members of the ICAR MedCom attended this one-day symposium, which was held on Friday, 25 September. The next meeting will be in two years in Tromso.

Note: This report is based on the minutes of the Fall 2009 ICAR MEDCOM meeting, kindly provided by John Ellerton.