

4 EXPEDITION FIRST AID TRAINING

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All expedition team members should have at least basic first aid training – if there is only one trained first aider it might be this person who becomes ill or injured. It is also important to ensure that a trained first aider is available at each project site if the expedition will be operating in several different locations.

The aims of conventional first aid, as taught by such organisations as the St John’s Ambulance and the British Red Cross, are to preserve life, limit worsening of the condition and to promote recovery.

TABLE 4.1 AIMS OF FIRST AID

- To preserve life
- To limit worsening of the condition
- To promote recovery

EXPEDITION FIRST AID

The management of sudden illness or injury on an expedition is very different from giving conventional first aid in the UK:

1. First aid is often needed in difficult environmental conditions – heat, cold, at high altitude, in rain or snow.
2. Formal medical care can be delayed for hours or even days because of a hazardous location, poor weather conditions or lack of communication and transport.
3. Some illnesses and injuries, such as altitude sickness and snakebite, are more likely on an expedition than in the UK.
4. Advanced first aid techniques, such as straightening broken limbs or treating infections, may be necessary.

5. Expedition medical supplies and equipment will be limited, particularly for small groups.
6. Some victims will recover without requiring formal medical care or evacuation. However, the basic principles of first aid still apply.

TABLE 4.2 PRINCIPLES OF FIRST AID

- Assess the situation
- Make the area safe
- Assess all casualties
 - start with the A B C of resuscitation
 - identify the injury or illness
- Give easy, appropriate and adequate treatment in a sensible order of priority
- Organise removal of casualty to secondary care where appropriate
- Make and pass on a report

CORE FIRST AID SKILLS

The only way to prepare for accidents on an expedition is to go on a first aid course, while recognising that the situation is likely to be very different from a similar emergency in the UK. You may have to move a casualty with a suspected neck injury because there is a great risk of avalanche, for example. This sort of problem should be dealt with on your first aid course. All members of an expedition should receive training in core first aid skills. Remember that simple techniques such as clearing the airway or stopping heavy bleeding make the difference between life and death, but you will not have time to look these up in a book. The more realistic your first aid training the more likely you are to be able to recall what to do in an emergency situation.

TABLE 4.3 CORE FIRST AID SKILLS FOR ALL EXPEDITION MEMBERS

- Scene and casualty assessment
- Resuscitation
- Control of bleeding and the treatment of shock
- Management of fractures and dislocations
- Care of the unconscious casualty
- Safe movement of the injured patient

BASIC MEDICAL SKILLS

Basic medical skills for expedition medical officers (MOs) and for as many of the expedition team as possible should include core first aid skills, general medical skills (traditional first aid skills), diagnosis and management of common medical problems, diagnosis and management of serious medical problems and diagnosis and management of environmental problems (Table 4.4.) This is a bare minimum for expedition MOs. The MO should know how to diagnose and manage each condition listed.

TABLE 4.4 BASIC MEDICAL SKILLS

- 1 **Core first aid skills**
- 2 **General medical skills**
 - Management of
 - blisters
 - bruises
 - sprains and strains
 - cuts/grazes
 - splinters
 - cramp
 - burns/scalds
 - wound care
 - bleeding
- 3 **Diagnosis and management of common medical problems**
 - Common infections
 - Headaches
 - Asthma
 - Epilepsy
 - Diabetes
- 4 **Diagnosis and management of serious medical problems**
 - Allergic shock
 - Abdominal emergencies
 - Heart and lung conditions
 - Eye/ear problems
 - Dental conditions
 - Chest/abdominal injuries
 - Head/spinal injuries
 - Establishing death
- 5 **Diagnosis and management of environmental problems**
 - Heat-related illnesses
 - dehydration

- cramps
- sunburn
- heat exhaustion/stroke
- Cold injuries
 - frostnip/bite
 - hypothermia
 - immersion cold injury
 - drowning
 - non-freezing cold injury
- Altitude problems
- Bites/stings
- Malaria and other important tropical infections
- Leeches
- Diarrhoea and its avoidance
- HIV and other blood-borne problems

Further information on diagnosis and management of these conditions is found in later chapters of this book and in most general medical textbooks. However, having the confidence to make the right decision is essential and will only come from attending courses and gaining field experience; do not rely on books and manuals alone.

The expedition medical officer, and as many of the expedition team as possible, should attend a specialist course. The advantage of these are that they teach you how to deal with problems that are likely to occur in remote places and often stress more advanced first aid and care to be given during evacuation. However, courses of this kind tend to be quite expensive and may last for several days in order to cover the relevant topics. Alternatively a doctor or nurse accompanying the team may teach the rest of the team about important medical problems. This is often a good team-building exercise and might involve practical sessions on moving a casualty or using splints for fractures.

With the above information we suggest you assess your own capabilities, decide what level of medical skills your expedition requires and what skills you already have, and then look carefully at the various courses available and find one that suits your needs.

FIRST AID COURSES

Listed below are details of a number of organisations that offer first aid courses in the UK. These range from basic first aid to those tailored to expeditions and more advanced paramedic training. When deciding on a first aid course in preparation for becoming an expedition MO, it is worth comparing the suggested “basic medical

skills” for expedition MOs with the course syllabus. Please note that this list is not exhaustive. If you know of any other suitable courses that are not listed here, or have more up-to-date information, the Royal Geographical Society – Expedition Advisory Centre (RGS–EAC) would be interested to receive details.

Basic first aid

This is best learnt by attending one of the many standard courses run by the St John’s Ambulance or the British Red Cross. The cost of such courses varies in different parts of the country, and information on course dates and times can be obtained by contacting the local branch offices. National offices can provide local branch telephone numbers.

British Red Cross: Tel. +44 20 7235 5454

St John’s Ambulance: Tel. +44 20 7235 5231

Many ambulance services also provide first aid instruction and details of the ambulance service training units can be found under the first aid section of the *Yellow Pages*.

Advanced first aid training

The need for this depends on how far from medical help an expedition will be operating. The EAC has sent representatives on the following courses and found them to be particularly relevant to expedition members and medical officers.

Wilderness Medical Training (WMT)

WMT offers advanced first aid training for expeditions operating in remote areas of the world, particularly for those expeditions without professional medical support. The use of antibiotics and other prescription drugs is covered on all courses. Residential courses include “Far From Help” over 3 days and “Advanced Medicine for Remote Foreign Travel” over 5 days; the latter also includes the teaching of invasive techniques (drips, suturing, injections, etc.). The majority of the teaching on WMT courses is delivered by doctors with extensive overseas expedition experience. WMT also runs an annual 5-day conference for expedition doctors in Chamonix, France.

Contact: Barry Roberts
 Commercial Director, WMT
 The Coach House
 Thorny Bank
 Skelsmergh
 Kendal
 Cumbria LA8 9AW
 Tel. fax +44 1539 823183

EXPEDITION MEDICINE

Email: office@wildernessmedicaltraining.co.uk
Website: www.wildernessmedicaltraining.co.uk

Rescue Emergency Care

The REC scheme (Health and Safety Executive [HSE] registered) offers six 2-day modules ranging from basic to expedition first aid. The emphasis across the full range of the modules is effective first aid provision, with the minimum of equipment, in remote environments. In order to achieve this these concept-based courses rely heavily on practical scenarios to introduce an element of realism that expedition doctors, medics and first aiders should be prepared for. Courses are tailored for specific groups such as exploration teams, film crews and mountain rescue teams. The scheme has trainers instructing throughout the UK and the courses are recognised and approved by the British Mountaineering Council, Mountain Leader Training Board, Royal Yachting Association and British Canoe Union.

Contact: Peter Harvey
Wilderness Expertise Ltd
The Octagon
Wellington College
Crowthorne
Berkshire RG45 7PU
Tel. +44 1344 774430, fax +44 1344 774480
Email: REC@wild-expertise.demon.co.uk
Website: www.wild-expertise.demon.co.uk

British Red Cross

The British Red Cross, in addition to basic first aid courses, provides specialist courses for “Outdoor Activity” and “Expedition First Aid”. These are modular courses with specialist elements, including casualty handling and specific modules on key environments such as the tropics and cold climates, and key activities such as caving, mountaineering, water sports and pony trekking.

Contact: Lynne Covey
British Red Cross Society
9 Grosvenor Crescent
London SW1X 7EJ
Tel. +44 20 7235 5454

Life Support Training Services (LSTS)

LSTS provides modular courses aimed at those going to remote areas. There is a basic course (2 days) and a choice of advanced courses (3 and 5 days). If there is sufficient

demand, i.e. an entire expedition, the courses can be arranged at a venue of your choice with cost by arrangement, depending on numbers and venue. The courses concentrate on practical skills in as realistic a setting as possible.

Contact: Daryl Wight
Life Support Training Services
2 Underhill Cottages
The Hill
Millom
Cumbria LA18 5HA
Tel. fax +44 1229 772708

Orion First Aid

Orion are registered with the HSE to deliver first aid courses to industry and commerce. In addition they also provide first aid courses to the general public that specialise in outdoor pursuits and exploration group organisations. Their instructors have wide-ranging experience, having seen and dealt with frontline trauma injuries, coming from Mountain Rescue, Cave Rescue and NHS paramedics. Courses include: Emergency First Aid, Mountain First Aid, Advanced Mountain First Aid and Expedition Medicine. They also specialise in maritime courses.

Contact: Stan Farrington
Orion First Aid
Brownrigg Guide Road
Hesketh Bank
Nr Preston
Lancashire PR4 6XS
Tel. fax +44 1772 812 277
Website: www.oriontraining.co.uk

Andy Sherriff – Specialist First Aid Training

Training is available to suit all requirements, from basic to highly advanced, whether the expedition be to the high mountains or the tropics. Courses are run as a progression of 2-day units. Expedition members can enter the scheme at “foundation” level or higher, depending on experience and existing first aid training. Current courses include: “First Aid for Mountaineers and Instructors”, “Advanced Immediate Care” and “Expedition Medical Care”. All courses exceed the requirements for National Governing Body Awards (MLTB, BMC, BCU, etc.). The emphasis of training is towards the delegates gaining the necessary skills to provide appropriate medical care in remote locations, using formal and improvised equipment. Andy Sherriff is a HSE-registered training provider.

EXPEDITION MEDICINE

Contact: Andy Sherriff Specialist First Aid Training
Nyth yr Hebog
Llandyrnog
Denbigh
North Wales LL16 4HB
Tel. fax +44 1824 790195
Website: www.mtn.co.uk/sherriff

Courses tailored to special requirements

The Ieuan Jones First Aid Course for Mountaineers

Contact: Gerry Lynch
Tel. +44 1248 600589

Mountaineering expeditions might like to attend courses specially run for members of mountain rescue teams (some of the best first aiders in the UK belong to mountain rescue teams).

British Association of Ski Patrollers (BASP)

Contact: Fiona Gunn
Tel. +44 1855 811443

First aid and medical courses are also run by various outdoor adventure and training centres and these should be contacted individually to find out when and what sort of courses they offer. Centres that run first aid courses include:

Glenmore Lodge, Aviemore	Tel. +44 1479 861256
Brathay Hall, Ambleside	Tel. +44 1539 433041
Plas-y-Brenin, Capel Curig	Tel. +44 1690 720366
Outward Bound Schools	Tel. +44 990 134227 (Head Office)
Aberdovey	Tel. +44 1654 767464
Loch Eil	Tel. +44 1397 772866
Ullswater	Tel. +44 1768 486347

Other expedition medicine courses

ExpeMed Expedition Medicine Course, Glasgow

Frontline Medical Services organise 4-day courses for medical professionals who wish to undertake the role of medical officer on expeditions to remote areas. Courses are suitable for doctors, nurses, dentists and paramedics. The aim is to provide training on all aspects of expedition medicine with emphasis on pre-trip planning, casualty management and casualty evacuation. Instructors have backgrounds in medicine, pre-hospital care, rescue and expedition management. Specialist vehicle extrication is provided by Strathclyde Fire Brigade and a full day of outdoor casualty

scenarios and rescue training is provided by the Arrochar Mountain Rescue Team. ExpeMed courses are organised and run by Frontline Medical Services Ltd.

Contact: Stephen Hearn FRCSEd, Dip IMC, Course Director

Tel. fax: +44 1389 877811

Email: expemed@frontlinemedics.com

Website: www.frontlinemedics.com