

# 17 MEDICAL ASPECTS OF SURVIVAL

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Many readers will already be familiar with the demands of expedition travel to wild and unfamiliar places. Fatigue, hunger, pain, thirst and even a measure of fear are, to an extent, routine features of an expedition. It is probably these aspects of any venture that are the source of the best expedition anecdotes and the most enduring, if least accurately framed, memories.

Few people, however, will ever experience a true survival situation when life and death hang in a fine balance and all other concerns become secondary. Survival is the art of staying alive. The human body and, perhaps more importantly, the spirit have the capability to endure the most extreme hardship and deprivation under seemingly impossible conditions. Examples of this tenacity can be found in an extensive literature recounting survival situations.

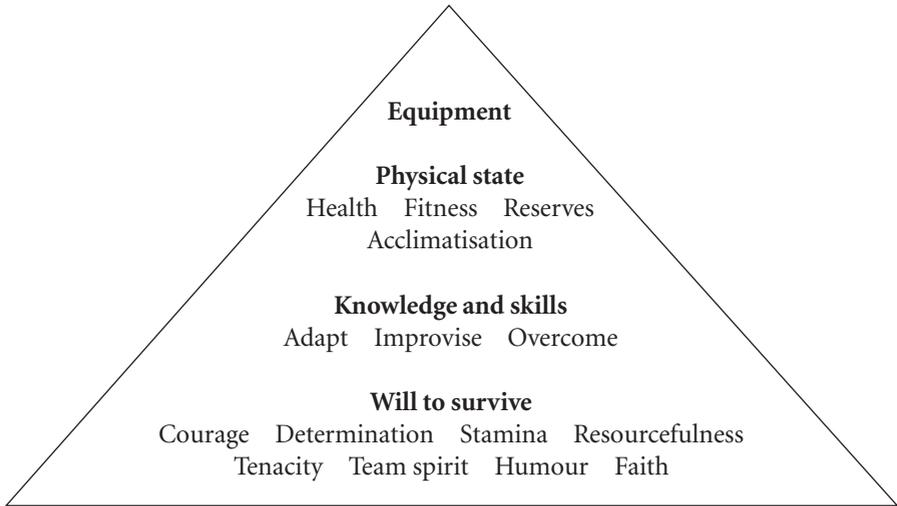
Although a number of well-documented cases have involved a prolonged period of isolation, the “Robinson Crusoe” scenario is rare and most survival situations are played out in the course of hours and days rather than weeks and months. In all cases, however, it is usually possible to identify a number of core issues that determine the eventual outcome.

## **The pyramid of survival**

Survival skills can be represented as a pyramid. The most important elements form the broad base and are the factors that distinguish the survivor from the victim. The relative importance of the other components varies in different situations and with different personalities.

## **The will to survive**

Qualities of character and resolve usually dictate the chances of survival. Physically unprepared individuals with no equipment or specialist skills have survived against all the odds by refusing to surrender to death. The survivor will cling to the last threads of life, however desperate the circumstances. Escape or rescue, followed by



treatment and rehabilitation, allow a return to normal life in almost all cases, but once the threshold of death is crossed all is lost.

When disaster strikes, initial feelings of panic and self-pity must be controlled. Positive action even in a most rudimentary form will improve self-confidence. Courage, determination and tenacity are important qualities, but it is also important to maintain individual and group morale. Humour and faith (in all its forms) are important in this regard.

For groups, survival situations present new challenges for the leader or leaders. Often a very different style of leadership is required and the demands of the new circumstances can bring previously unrecognised strengths of certain individuals to the fore. The case of the Argentine rugby team isolated in the high Andes following an aircraft crash is an interesting example (see the film *Alive*, available on video).

### **Knowledge and skills**

Self-confidence can be enhanced by good training and sound knowledge. Much of this will be of a general nature but basic skills in the essentials of survival should be practised by all who venture any distance off the beaten track. A number of books and training courses are available to provide an introduction to this subject.

For any specific trip or expedition, thorough research and planning are essential. The demands of the environment or other possible threats should be identified and studied. Contingency plans and reserves should be in place to cope with likely problems, and a means of summoning help or evacuation should be established. Throughout the venture all team members should be kept fully informed of key data,

such as local terrain, key locations, personnel distribution, weather patterns and communication plans.

Knowledge dispels fear and is an important weapon in the fight for survival. This must be coupled with resourcefulness and a will to adapt, improvise and overcome.



Figure 17.1 *High-frequency radio communication between Everest Base Camp and Kathmandu (R. Stables)*

### **Physical preparation**

Medical and dental health should be checked before departure on any venture. Personal health issues, such as the need for medication (even the contraceptive pill), should be considered and an emergency stock carried on the person at all times.

Physical fitness is a key factor in a survival situation and will allow the individual to cope better with not only physical exertion but also sleep deprivation and climatic extremes. In some environments and for prolonged expeditions it can, however, be a mistake to be too lean. Adipose (fat) tissue is laid down to act as a food reserve in times of need and can provide important thermal insulation.

A period of thorough acclimatisation to extremes of temperature, altitude or other environmental factors should be allowed before expedition members are subjected to the risks of isolation from support.

### **Equipment**

Well-chosen equipment is obviously important but it is critical to ensure that key

items are available when needed. Each expedition or individual should have a clear concept of what should be carried:

- on the person;
- in the pack or on the belt when away from base camp;
- at the base camp.

Survival situations often start with the loss of equipment. Key items such as map, compass, torch and whistle should be carried on the person and secured by lanyards at all times. Other equipment choices and standard procedures will be governed by the nature of the trip and personal preferences.

### **Summary**

It is impossible in this short chapter to offer anything more than basic guidelines. More detailed information, perhaps specific to the expedition aims, will have to be sought in appropriate texts and appropriate skills acquired and practised.