

## Chapter 11

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# *Emergency Procedures*

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The primary responsibility of the leader of a hiking party to the mountains is to ensure the safety of his party at all times. To do so he must take the necessary precautions to ensure that his group never gets into a situation which necessitates a search and rescue operation.

A search and rescue is usually neither simple nor cheap. Search and rescue specialists often have to be contacted and transported to the scene. If a helicopter is involved, the costs attached to a search and rescue will be high. During a rescue the lives of the rescue team are sometimes also endangered.

However, even on a carefully planned expedition led by an experienced leader an accident can happen or an emergency arise. Should this happen, it then becomes the task of the leader to do everything he can to ensure that the situation is dealt with correctly and effectively.

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## *Search and rescue procedure*

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This section does not aim to teach the leader how to carry out a rescue; the aim is rather to provide you with the skills that will allow you to be rescued. To carry out a mountain rescue usually requires varied skills and expertise and frequently also rock climbing experience. For this reason a rescue is best left to experts to perform.

Rescue methods and procedures have improved over time. The helicopter, in particular, has greatly extended the rescue capability of the modern rescue team.

Where once it might have taken days to evacuate an injured person from the Drakensberg or the Boland mountains, this can now be done within hours. This knowledge can never be used to justify taking a risk, however, since the feasibility of a helicopter rescue depends on a number of factors, chief of which is the weather. Since many accidents in the mountains can be attributed directly to bad weather in the first place, it would be extremely unwise ever to work on the assumption that rescue is only hours away in an emergency.

Even with a helicopter, and given ideal weather, it will take a number of hours to carry out a rescue. To this should be added the time it takes someone going for help to reach the nearest telephone, plus the time required to alert a rescue party.

One should distinguish between a search and a rescue. A rescue (or evacuation) can be carried out by a small group of experts when the location of an injured person is known. A search, on the other hand, often involves a large number of people combing an area on foot, and it could take days. A search usually leads to a rescue, or the retrieval of a body. For this reason, the term 'rescue' is used in this chapter to refer to both search operations and rescues.

## **Local rescue structures**

The Mountain Club of South Africa (MCSA) has traditionally assumed responsibility for mountain rescue in South Africa, chiefly because the members of the various sections of the Mountain Club know the mountains of southern Africa well and because they have the necessary experience, manpower and equipment to perform rescues. Mountain Club rescue services are provided on a voluntary, free basis.

## Co-operation with various authorities

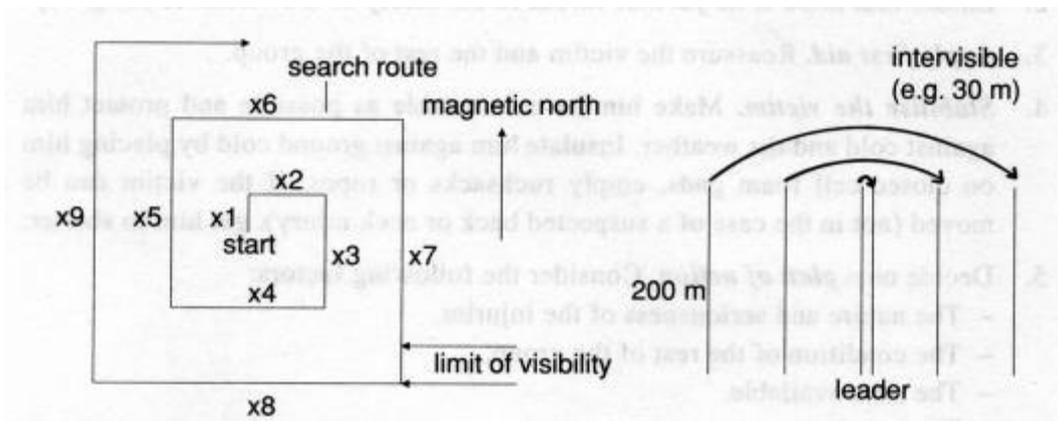
The MCSA co-operates closely with various organisations which can provide additional resources such as equipment and manpower. The names of rescue officers are kept in a central place, either by the Police or Metro control centres, and this allows the Club search and rescue organisation to be contacted and activated very quickly.

It is imperative for every leader to know which organisation to contact and how to contact them, should assistance be required in the area where he is climbing or hiking. In the Cape and Natal it is Metro, otherwise the Police. When in doubt, contact the Police.

## Procedure if a party member is lost

Before making use of the full search and rescue infrastructure described above, you can first conduct your own search for one or more party members who have got separated from the group by accident.

1. Leave at least one member at camp.
2. Decide on a search pattern appropriate to the area.
3. If you decide to split up the search party, determine a time and place for regrouping (the camp site is often a suitable base from which to work). Never send off fewer than two persons per search party.
4. Arrange for whistle or hand signals to indicate that the missing members have been found. Where possible, make use of high ground and binoculars.
5. While walking on the search pattern you can occasionally shout or blow on whistles — use the principle of a minute of noise, followed by a minute of silence.

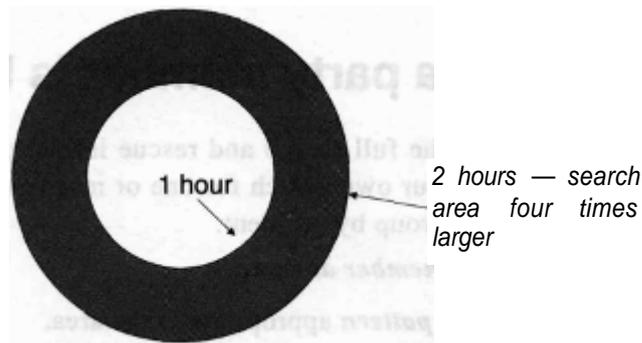


*Two search patterns*

## The importance of a quick response

A quick response means putting searchers into the field to minimise the size of the search area. This area can grow larger with each passing hour. Remember: a search is an emergency, because:

- The subject may need emergency care.
- The subject may need protection from himself or the environment.
- Time and weather destroy clues.
- A quick response lessens the search difficulty.



*The size of the search area grows larger with each passing hour*

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## ***Accident procedures***

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If an accident should happen to a member or members of your party:

1. Do not panic: act speedily, not hastily.
2. Ensure that there is no further threat to the safety of the victim or the group.
3. Apply first aid. Reassure the victim and the rest of the group.
4. Stabilise the victim. Make him as comfortable as possible and protect him against cold and the weather. Insulate him against ground cold by placing him on closed-cell foam pads, empty rucksacks or ropes. If the victim can be moved (not in the case of a suspected back or neck injury), get him to shelter.
5. Decide on a plan of action. Consider the following factors:
  - The nature and seriousness of the injuries.
  - The condition of the rest of the group.
  - The time available.
  - The weather.
  - The availability of help.
  - The route that will have to be followed during an evacuation.
6. Try to draw the attention of people in the vicinity, for example by using the international emergency signals (see table). Repeat the signal until someone confirms it.
7. If it is essential and possible to evacuate the patient yourself, improvise a stretcher (some ideas on how to do this are shown below). These improvised methods for moving a patient are only intended for use over short distances and are therefore mainly used to get an injured person to shelter. It would be dangerous to try to move an injured person down a steep slope using one of these methods, since further injury can easily result. They should therefore be regarded as a last resort in situations where leaving the patient where he is would be more life-threatening than moving him. Bear in mind that it is extremely exhausting, even for a large group, to carry someone any distance over rough terrain. In a remote mountain area such as the Drakensberg a large group would be required to evacuate a badly injured person, unless a helicopter could assist with the rescue.
8. If necessary, send for help. At least two people should be sent, with sufficient equipment to

deal with an emergency. The messengers should remember that the victim and the rest of the group depend on them to obtain help. They should therefore rather move safely and slowly than too fast.

9. Never leave the victim alone. If there is an absolutely imperative reason why this has to be done, you should ensure that he does not have to move from the place where he is left. Leave as much food, water and warm clothing with him as possible, and also a whistle and a torch. Mark the spot clearly by tying a colourful piece of clothing or some other item to a bush or a cairn of rocks. A climbing rope may be used to mark off even a fairly large area.

Remember that the rescue group may have to find the victim in the dark or in bad weather, and that the person or persons who fetched help might not be in a fit state to accompany the rescue group back to the scene of the accident.

Never leave an unconscious person alone. Wait for help or try to attract someone's attention. If there is no other option (for example, if the group consists of only two people), leave a message with the injured person, explaining what happened. If the accident happened on steep ground, secure the person to the slope — an injured, semiconscious person may try to untie himself.

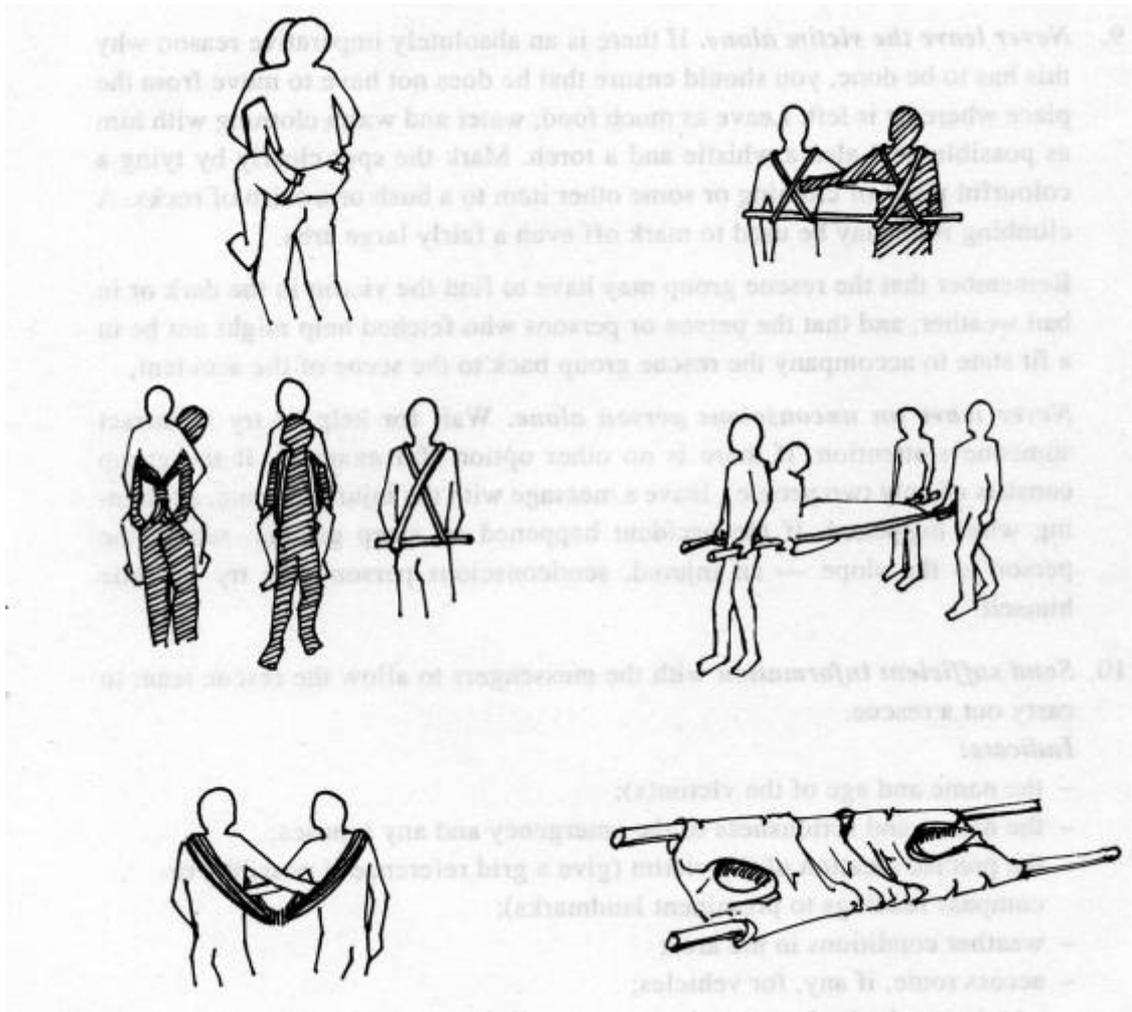
10. Send sufficient information with the messengers to allow the rescue team to carry out a rescue.

Indicate:

- the name and age of the victim(s);
- the nature and seriousness of the emergency and any injuries;
- the precise location of the victim (give a grid reference if possible, or compass readings to prominent landmarks);
- weather conditions in the area;
- access route, if any, for vehicles;
- whether rock climbers or other experts will be required;
- if someone is missing, the route which he may be expected to follow, his position when last seen and his expected time of arrival, what he was wearing, and what equipment he had with him.

The messenger should try to contact the nearest Police station, Metro control centre, or someone on the Mountain Club rescue list. He must then remain at the telephone so that the rescue leader or organiser can stay in contact with him and should leave his post only with the approval of the rescue organiser.

11. Inform the next of kin of the situation. The contact person back home must be informed of the situation and kept up to date with all developments. He can then inform all the next of kin involved, which makes it unnecessary for the person who brought news of the emergency to contact them.



Improvised methods for carrying an injured person.

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## Rescue procedures

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### Evacuation of a person with minor injuries

A lightly injured person can be evacuated in a number of ways. If, for example, he has injured an ankle, he can probably be evacuated by two people who support him from either side. Other improvised methods for carrying an injured person (shown alongside) can be used if the nature of the person's injuries, the terrain, and the distance to be covered permit this.

Message	Flare Signal	Sound or Light Signal
Help Needed	Red	Six short signals in quick succession. SOS: three short, three long, three short signals in quick succession, repeat after one minute
Message Understood	White (also for lighting)	Three signals in quick succession; repeat after one minute
Returning to Base	Green	Long series of signals

Site of Base

Yellow or White

Continuous light

## Specific helicopter procedures

1. Move the casualty close to a suitable pick-up zone. Helicopters cannot operate close to rock faces, deep gorges, or on exposed ridges in high wind.
2. A clear, flat area of at least 25 m diameter is required for an Alouette helicopter, with no objects higher than 6 m on the edges. If necessary, mark the landing zone with brightly coloured objects, but make completely sure that these are totally secure against the powerful downdraft of the rotors.
3. Remove loose clothing, hats, etc. Ensure that objects (e.g. tents) within 20 m of the landing zone are securely fastened down.
4. Keep out of the landing zone.
5. Ensure that the helicopter pilot can see you, i.e. approach the helicopter from the front only, at roughly a 45° angle, only on a clear signal from the pilot or flight engineer. Keep low to avoid the blades.
6. Do not move the casualty if there is any danger of further injury. Wait for the rescue team and doctor or paramedic to arrive with rescue stretchers.
7. The helicopter pilot has absolute authority over his craft, the crew and the passengers. His decision as to whether the rescue is feasible or not is final.

