

## Safety And Health Of The Group

Be Weatherwise

Wind Chill

If You Get Lost

In Case Of An Accident

Hypothermia

Carries

SOS

Survival Kit

The leader should be vigilant at all times and be constantly checking and monitoring the condition of the group:

Are they tired ?

Are they too hot, do they need to remove clothing ?

Are they getting cold, do they need more clothing (watch out for wind chill factor)?

Are they happy ?

Are those at the rear of the group in difficulty for some reason ?

Are packs too heavy ?

How is the weather going, will it rain soon etc.?

Is anyone complaining of sore feet ?

Is anyone showing signs of exposure?

Is everyone dry, if they are wet it can lead to misery and possibly exposure?

You should also be aware of your surroundings and check your map closely to ensure that you know exactly where you are.

Never be afraid of turning back if weather conditions worsen or you realise that the route is too hard or long or if you think the group are not up to it. The route should be a challenge for young people not a challenge for the leader.

The leader of a group has a lot of work to do, so keep alert, solve problems early and as soon as they appear. Your life can be made easier by sharing these responsibilities with the other adults leading the group and with your Patrol Leaders.



## Be Weatherwise

Before setting out on an adventure in open countryside it is vital that you check on the expected weather conditions. This weather forecast can be obtained in general terms from the television however a more comprehensive forecast can be obtained from the formal weather transmissions on local radio stations.

These formal weather transmissions give detailed information of local weather conditions and expected weather conditions. These reports however should only be used as a guide.

Mountainous areas create their own micro climates. It can be warm and sunny in the valley whereas a dense fog can envelop the mountain tops.

The added factor of wind can reduce temperature dramatically. The wind can also blow bad weather in your direction. The wind pushing clouds towards the mountain so that clouds have to rise to overcome mountain range. This cools the temperature of the cloud and it rains, more often on top of the mountain rather than the valley.

The time of year plays a big factor in conditions that can be expected in open countryside. Summer and winter hold their own problems regarding temperature from heat exhaustion to exposure. Always take extra precautions in cases of extreme cold such as snow or icy conditions.

All the above should cause a leader to be careful of the weather. Always know the local weather forecast and be prepared, if possible seek local knowledge concerning conditions / micro climates which exist in area.

## Wind Chill

Suppose you are standing in a bathroom preparing to have a bath or a shower. You are unclothed, dry and comfortable. In the corner of the bathroom a fan begins to turn. Soon you begin to feel cool.

A thermometer would show that the temperature had not changed - so why do you feel cold. Think of what has happened.

A layer of air next to your skin which is directly warmed by your body is being blown away by the wind created by the fan. Before the fan began to turn, this warm layer of air had risen slowly by convection and so had only to be replaced slowly and be reheated by your body. With the fan running this convected heat is being whisked away by the action of the wind and your body feels cold. The faster the fan turns the colder you feel.

Remember, we suggested that you are dry so the effect is not caused by evaporation. It is also obvious that had there been a reduction in the temperature of the room but no change in the speed of the fan you would again have felt colder.

Are there any other factors besides wind speed and temperature to be considered . Lets go back and start again but this time include a radiant heater next to the ceiling ( the sun). As the fan revolves we will again experience the sensation of cooling but this time it will be less pronounced.



It may, therefore , be assumed that the radiation of the sun reduces the effect of wind cooling (wind chill). However, wetness of the body or damp or soaked clothing can rapidly cool the insulating layer and draw heat from our body.

Therefore windchill is primarily a combination of three factors: -

Wind speed

Temperature

Solar radiation

The term solar radiation is used rather than sunshine because the sun may shine at any time of the year but the heat from it will differ from summer to winter.

The concerns of wind chill therefore are the reduction of the insulating layer of warm air from our bodies. This is controlled by the clothes that we wear. The protective clothing we wear reduces but does not totally stop the loss of our shielding blanket of warm air as there are often weak points at the face, wrist and ankles. If this protective layer is wet then it can lose its protective properties so dry clothing are a must in maintaining heat levels.

Leaders need to be aware of the effects of the wind especially the cooling effects it creates. It is this wind chill factor that is one of the primary reasons for the onset of hypothermia or exposure. Leaders therefore should pay particular attention to the clothing and equipment in use by the group and what is been worn at different stages of your journey. (See equipment section)

## Dealing With Emergencies

Emergencies will happen and despite your most careful planning someone may trip or you or a member of your group may get lost.

Be prepared for emergencies then you will have the skills to overcome the problem and lead your group to safety. This is achieved by training both before and on adventures in the countryside.

By anticipating likely accidents and emergencies and having the correct equipment with you to deal with them.

If a situation should occur the first thing to do is not to panic. Sit down. Think the situation through. Then act decisively.



### If You Get Lost

1. Stay together. Don't let members of the group wander off in all directions.
2. Sit down and keep calm.
3. Carefully work out from your map your approximate position, if possible do a resection with your compass to find your position.
4. If you are reasonably sure of your position take a bearing and trust your compass.
5. If you are caught in fog or darkness then you might consider staying put for the night or waiting till the fog lifts. If you decide to travel on a compass bearing then use your group as markers on a compass bearing to ensure accurate line of travel.
6. Consider escape routes. Head to the nearest road or track on your map. Do not follow streams and rivers downhill. They may end in waterfalls.
7. If you feel you are in a difficult situation and can do nothing to enable you to move to safety then stay put, erect a shelter or find a sheltered spot and await help. Give the International Distress signal in case a rescue party is searching for you.



## In Case Of An Accident

1. Do any immediate first aid that is necessary and treat for shock.
2. Keep the victim as comfortable as possible and ensure they are warm. If necessary erect a shelter or tent to protect victim from the elements.
3. Assess your situation. If injuries are minor then consider carrying the victim to safety either by hand carrying or by improvised stretcher. If injuries are unknown due to lack of knowledge or by the fact that the victim is unconscious or has serious injuries then stay put and send for help.
4. You should mark your position by way of survival bags, flags, fires so that you can be found easily.
5. Two experienced members of the group should go and seek help and assistance. The messengers should carry and give the following information to the emergency services concerning the accident: -

Exact position, giving a six figure grid reference and as much information as possible of location of victim.

Time of accident

How many people are injured

Nature of injuries to victim

6. The messengers should contact the emergency services by dialling 999 or 112 on a telephone. The operator can connect them to relevant service.
7. The international whistle signal should be employed by the group to assist the rescue party to locate victim - six blasts on a whistle or six shouts or six flashes of a torch followed by a pause of one minute. Then a repetition of the signal. If you signal is heard you should hear and answer whistle - three blasts followed by a pause of a minute and repeated until they find you.

## Hypothermia

Although any one of the following factors can cause hypothermia, it is normally a combination of several. All are familiar in Ireland. They are cold, wind and wetness, which, if combined with fatigue, injury, illness, unfitnes, inadequate clothing or lack of food, can rapidly cause death.

To understand hypothermia, it is necessary to know how the body manages to heat itself.

The body can be divided into roughly two sections, at the centre is the core which contains the vital organs of our body. The core of the body is kept at a constant temperature by certain automatic heat regulators.

The rest of the body forms a shell around the core allowing the heat regulators to work by dissipating extra heat away from the core or by maintaining the heat in the core by way of heat retention (clothes).

This regulation of heat cannot work however if external cold, like wind and rain together, penetrate the protective outer shell. When this chilling effect reaches the core we then say that the victim has hypothermia. This usually occurs when the core temperature drops below 35 C (95 F). At this stage the automatic heating regulators break down, and active artificial measures to re-warm the central core have to be taken rapidly to prevent death.

### Recognising Hypothermia

Hypothermia can be difficult to recognise that by the time you are aware of it, it maybe too late. For this reason, you must be extremely vigilant and observant in noticing anything a miss in bad weather conditions, this also relates to yourself and other leaders as well as the young people in your group.

The most important factor is weather. If any combination of wet, cold and wind or exhaustion are present then begin to be wary. As has been said before proper personal equipment can prevent rapid cooling of the body and insulate against such factors as wind chill.

Signs to look for:

Changes in the normal behaviour of people.

Slurred speech

Mood swings and irrational behaviour

The victim will also usually complain of being cold and may be shivering.

The victim may appear to be confused and maybe unable to say what is wrong.

The victim may stumble and appear to be drunk.

## Emergency Action

1. Stop, wherever you are, even if there is no shelter. If you can see shelter nearby then head for it.
2. Erect a tent or shelter around the victim
3. Get on dry clothes as quickly as possible and insulate the victim from the ground by way of a groundsheet or spare clothing to reduce heat loss
4. Get victim into sleeping bag or survival bag. Another member of the group should also join the victim. The victim can be reheated from the body of another person. It will be a tight fit but huddle together to heat victim. Do not rub cold hand and feet but rather warm them by placing them under your arm pits or between your thighs.
5. Give the victim warm drinks and food such as chocolate, and sugary foods and snacks
6. Send for help urgently, and be ready to give artificial respiration at any time.

## Do Not .....

1. ...give the victim alcohol
2. ...warm the skin by rubbing this may cause a rush of cool blood from the heart and cause damage to underlining tissue.
3. ...place a hot water bottle against the skin this may cause a rush of cool blood from the heart.
4. ...underestimate the seriousness of hypothermia.

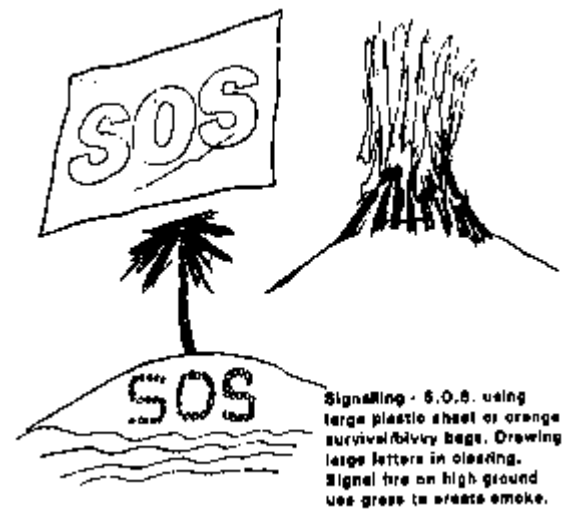
If hypothermia strikes a member of your group it is very likely that it could effect others in the group. Therefore in treating your victim you should not forget the rest of the group. (as you treat your victim the other 20 members of your group are standing around in the cold, wind and rain and you could have 20 more victims in a short time).

## SOS

The safety of the whole group is paramount so decisions will have to be taken with the other leaders of the group, taking into account all the elements that make up your situation.

If you are near shelter then make for that shelter. It maybe a better option to break up the group leaving a small party with the victim while the rest of the group head to safety and seek help.

If you have camping equipment with you it maybe better to set up camp at this spot and treat the victim while a small party are sent for help. All these options plus other have to be carefully considered at the time.



The best option of all is to be prepared. Everybody on the trip should have the correct equipment (check everybody before they depart).

Making sure that every member of the group has eaten, and that they have eaten the correct food. Food that will provide energy and warmth to the body.

Have respect for the weather and plan you trip/journey accordingly. Carrying with you the correct survival equipment.

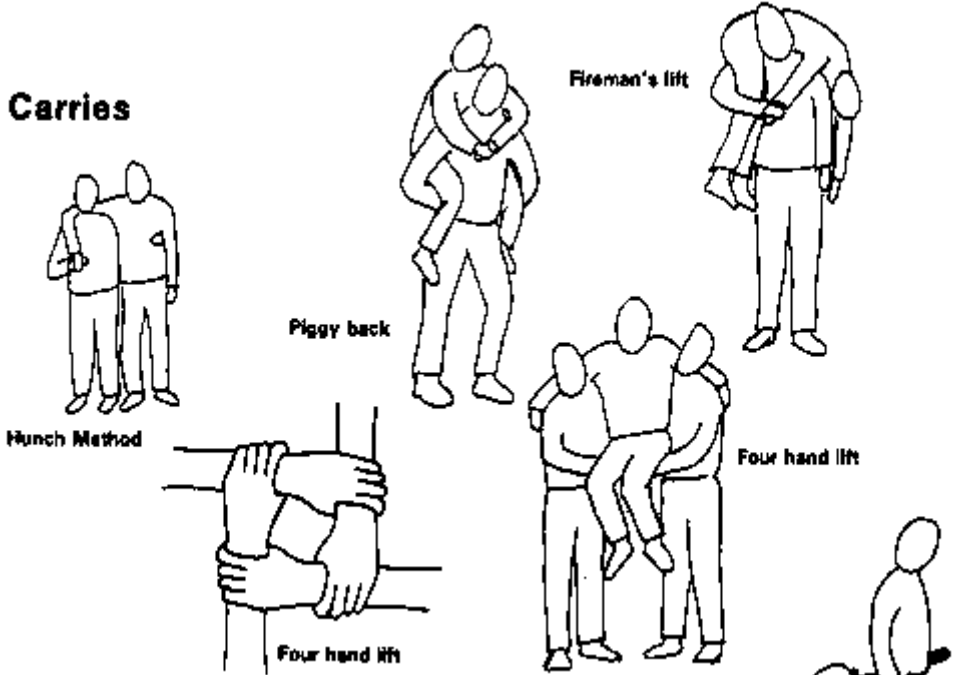
Having the correct number of leaders with you. ( a ratio of one leader to five or six young people).

Making sure that all the group has received training from leaders to young people.

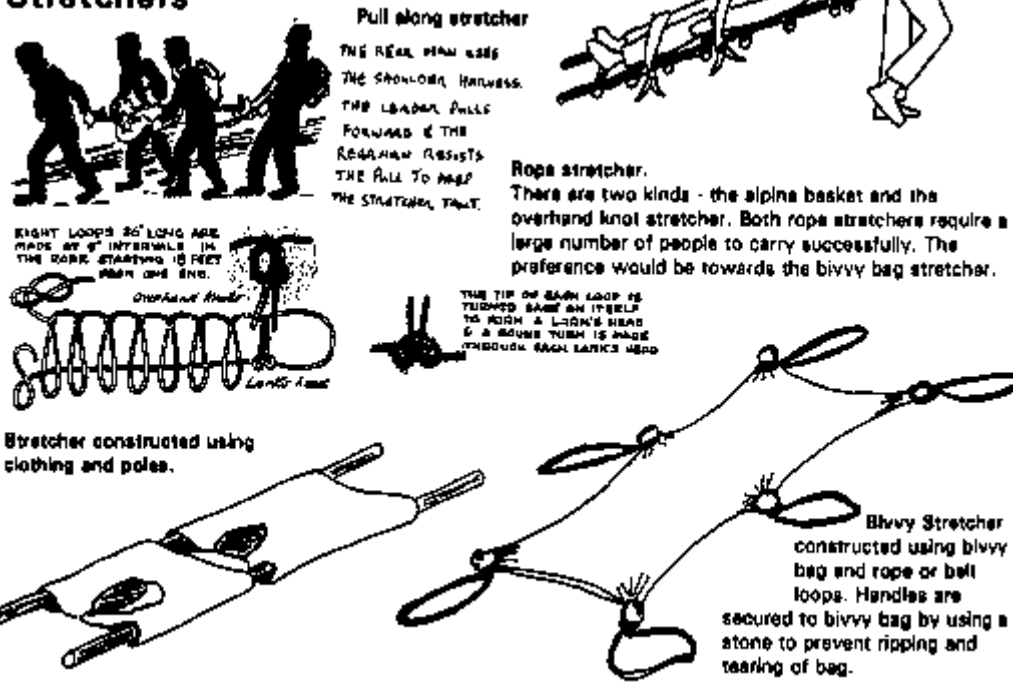
Having said all the above, if the correct equipment and approach to bringing young people into wild countryside are followed as described in this handbook and on the training course that forms part of this handbook then it is unlikely that you will experience a real case of hypothermia. It is more likely that a mild form such as chilling will occur. Usually, shelter and a warm drink and some chocolate and sugary snacks will revive the victim. However, be forever, vigilant and take care of the young people in your care.



### Carries



### Stretchers



## Survival Kit

Every member of your section should have a personal survival kit. This kit should be contained within a tight fitting or waterproof container and it should contain a number of items of equipment which will enable you to survive until you are rescued. Obviously this is intended to be a small item of equipment rather than a rucksacful of equipment. It will be of no use unless you are also familiar with survival techniques as described in this handbook.

In creating a survival kit it is important to include in it those items which will be of real use to you. Ask yourself the question - if I found myself in wild countryside without nothing else except the clothes on my back and my survival kit what would I like it to contain so as to enable me to survive - and no it is not big enough to hold a mobile phone!!

Below is listed a few suggestions which may set you in pursuit of the perfect survival kit:

Scalpel blades and handle	Compass	Money	Matches
Twine	Whistle	Needle and thread	Tinfoil
Fuel Tablets	Butterfly sutures	Safety pins	Small candle
Water purification tablets	Wire	Aspirin	
Gas lighter	Survival notes/ideas	Tin opener	
	Pencil – stub	Plastic bag	

Small pieces of food - packed into small spaces - raisins, Bovril, peanuts

The tin box in which the survival kit is contained can be converted into a cooking pot for boiling water or cooking a meal.