

First Aid (Walking Hill Walking)

The following information has been researched and compiled by the author and owner of BGMA. It is not intended to diagnose or treat any first aid or medical emergencies. The author has studied this area of survival for well over 10 years and is keen to pass on his knowledge and understanding, however you should always consult a recognised and qualified instructor and undergo structured training.

When walking in remote areas and the high hills, it is essential that at least one person in your party has some basic competence in First Aid.

The application of those skills in remote areas, and in wet, cold and/or windy weather is the challenge we face in dealing with emergencies in the British hills where any illness or injury is potentially more dangerous and difficult to deal with.

We have given a detailed briefing of **Hypothermia and Hyperthermia**, an understanding of both would be a great asset to any wilderness traveller or walker.

BGMA have only given basic guidance on incident management, diagnosis and general first aid treatment written for those who will be in the role of walk leader. Those of you who are interested in achieving a higher level of competency should consult a handbook on mountain craft and leadership or take a course for Mountain Leaders.

Being Prepared

You should always take with you a very basic set of first aid equipment. Select items which are versatile and multi-purpose. Balance commonly used items for minor problems with rarely used but potentially life saving items such as a plastic airway. For example, you should include: antiseptic creams, aspirin, tape, bandages, plastic bags, torch, plastic airway, light plastic gloves (to reduce transmission of infection).

Before setting out, it's also wise to find out if any of your companions are taking any medications and/or have any long-standing illnesses such as diabetes or asthma. It's important that everyone understands what will be encountered during the day and is confident that this is within his/her abilities.

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Incident Management

Even a relatively small incident can be exacerbated by other factors or trigger other events. As the leader of the group, you will need to make decisions about the most appropriate course of action. You will need to balance the range of risks for all concerned - sometimes a daunting task.

The first priority is to move everyone away from immediate danger. Next, you must assess the state of the injured person applying standard first aid practice.

BGMA TIPS!

Remember your ABCDE = Airway, Breathing, Circulation, Deformities, Emotions

Clearing a blocked airway is probably the most important life-saving action a first-aider can take. Most blocked airways can be cleared by following simple, basic manoeuvres. The three common techniques (tipping the head back, chin lift and jaw thrust) are best learnt by practical demonstration.

Now step back and try to get an overview of the situation:

- Location:** Is it dangerous?
How far from help, pick-up points, shelter?
- Weather:** How is it? How much daylight is left?
- People:** What injuries do they have?
How strong/able are they?
What is their emotional state?
- Equipment:** What do you have with you?
What can you improvise?
- The key decisions at this stage are:** Can you move your injured companion?
If so, how far to a better location/home?
If not, does the party split up with someone going for assistance?

Diagnosis

Unless you are medically qualified, aim to make only a broad diagnosis sufficient to allow you to decide what to do in your current situation. For example, is the chest pain actually heart pain or something else? If it's heart pain, then evacuation becomes the priority.

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The face and neck provide lots of information: skin colour for shock, pupil dilation for head injury, the neck has a pulse point, facial expression for pain, shock, breathlessness.

If someone is seriously ill or may deteriorate, you need to monitor (pulse, respiratory rate, how (s)he looks and - if head injury is suspected - pupil dilation, level of consciousness) regularly.

Record your findings on paper. If you are reporting the incident by messenger, then record in writing if possible: location, time, patient's condition, relevant recordings/times. Use layman's terms.

General First Aid Treatment

The aim is to attend to the basics:

- psychological state
- pain management
- warmth and comfort of patient
- provision of food and drink

Keep the patient informed, tell him/her your plans and offer other psychological support. Keep him/her as warm and as comfortable as possible.

It's not possible to over stress the importance of keeping the patient warm. Someone who is injured will get colder more quickly than usual. Provide (warm) food and drink if possible but DO NOT give food and drink to patients with abdominal injury or nausea/vomiting, or to someone who is unconscious.

If it's likely that the patient will need surgery within 4 hours then, food should be avoided. Clearly, this may be difficult to judge - you need to try and balance the chances of this against the benefits food would provide.

Contacting the Emergency Services when Walking, and Hill walking

In planning your route, try to establish the location of mountain rescue posts and/or places from where you could summon help.

As the leader of the group, you will have to decide on the best course of action in the event of an accident:

Can the party evacuate the casualty? Do you need to send for help using messengers?

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Evacuation of an injured person with anything other than a simple injury is a highly skilled activity. It is exhausting to attempt even a very short evacuation with improvised equipment. Worse - it is possibly dangerous for the casualty.

Judgment must be applied to evaluate the risk of this approach compared with the risks of leaving the casualty on the mountain.

If the best option is to send messengers, then the composition of this party needs very careful consideration. If the group is relatively inexperienced, it may be that the best person to go for help is the leader. Inexperienced walkers may be safer left on the mountain with strict instructions not to move.

In a party of two it is often difficult to judge which is the best course of action, While it is usually safest for the uninjured person to administer first-aid and provide morale support whilst attempting to attract the attention of other walkers/climbers this is not practical in very remote areas.

Whoever goes for help should take a written note with the following information:

- 1. Precise location of accident including a 6 figure grid reference**
- 2. A description of the location**
- 3. A description of the accident and time it occurred.**
- 4. Name of casualty and next of kin.**
- 5. Description of injuries. Stick to the facts.**
- 6. Outline of plan of action including names of other party members.**
- 7. Information about terrain and best approach route.**

Messengers should try to take note of terrain on the way down in case they have to lead back a rescue team. As soon as possible, contact the police who co-ordinate all land based rescue services and have the authority to mobilise all the services. You may need to stay close to the 'phone to be interviewed by the leader of the mountain rescue team.

If the best option is to summon help from the mountain, then you will need to attract the attention of other walkers/climbers in the area. There is an internationally recognised system of codes - audible and visual.

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Perhaps the two most important ones are:

Help

Red Flare

or

6 whistle blasts in quick succession

- repeated after a 1 minute interval

or

SOS = 3 short blasts, 3 long blasts, 3 short blasts

- repeated after 1 minute

or

6 flashes from a torch in quick succession

- repeated after 1 minute interval

or

3 short, 3 long, 3 short flashes

- repeated after 1 minute

Message Understood signal is:

White flare

or

3 whistle blasts in quick succession

- repeated after a 1 minute

or

3 flashes from a torch in quick succession

- repeated after 1 minute.

BGMA TIPS!

*It goes without saying that you **MUST ALWAYS** have either a torch or whistle with you (and preferably both).*

You may feel it is just a simple matter of contacting the Emergency Services using a mobile telephone. While it seems prudent to take a fully charged mobile telephone onto the mountains, it should be remembered that the chances of getting a clear signal are mixed at best. This method cannot be safely relied upon. If you can get through however, your first point of contact should always be the Police.

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Hypothermia symptoms take effect in three stages

(The Cold One)

1. **Mild Hypothermia** - Bouts of uncontrolled shivering. Grogginess and muddled thinking. Movements become less coordinated. Coldness is creating some pain and discomfort.
2. **Moderate Hypothermia** - Violent shivering or shivering that suddenly stops. Inability to think and pay attention confusion and apathy sets in. Slow, shallow breathing. Slow, weak pulse; speech becomes slow, vague and slurred; drowsiness and strange behavior may occur.
3. **Severe Hypothermia** - Shivering stops, skin is cold, may be bluish-gray in color. Victim is very weak, may appear drunk, denies problem. Little or no apparent breathing, or loss of consciousness. Weak pulse or irregular or non-existent. Victim may be very rigid, and may appear dead.

Treatment for the different levels of hypothermia

- **Impending Hypothermia** - Seek or build a shelter to get the person out of the cold, windy, wet environment. Start fire or cook stove to provide the victim with a hot drink (no alcohol, coffee or tea). Halt further heat loss by insulating the victim with extra dry clothes.
- **Mild Hypothermia** - Remove or insulate the victim from the cold environment, keeping the head and neck covered. This prevents further heat loss and allows the body to re-warm itself. Provide the victim with a warm, sweetened drink (no alcohol, coffee or tea) and some high-energy food. Limited exercise may help to generate some internal heat, BUT it depletes energy reserves.
- **Moderate Hypothermia** - Remove or insulate the victim from the cold environment, keeping the head and neck covered. Apply mild heat (comfortable to your elbow) to the head, neck, chest, armpits and groin of the victim. Use hot water bottles, wrapped Thermo-Pads, or warm moist towels. It is possible that you may have to continue this treatment for some time. Offer sips of warm, sweetened liquids (no alcohol, coffee or tea) if the victim is CONSCIOUS.

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- **Severe Hypothermia** - Place the victim in a pre-warmed sleeping bag with one or two other people. Skin to skin contact in the areas of the chest (ribs) and neck is effective. Exhale warm air near the victims nose and mouth, or introduce steam into the area. Try to keep the victim awake, ignore pleas of "leave me alone, I'm okay." **The victim is in serious trouble**, keep a close, continuous watch over the victim. Apply mild heat, with the aim of stopping temperature drop, not re-warming. If the victim has lost consciousness be very gentle, as by now the heart is extremely sensitive. Always assume the victim is revivable, do not give up. Check for pulse at the carotid artery. If, after two minutes you find no pulse, check on the other side of the neck for two minutes. If there is any breathing or pulse, no matter how faint, do not give CPR but keep very close watch for changes in vital signs. If no pulse is found, begin CPR immediately, stopping only when the heart begins to beat or the person applying CPR cannot carry on any longer without endangering himself. Medical help is imperative...hospitalization is needed.

BGMA TIPS!

Treatment of hypothermia should be approached with knowledge and care. It is altogether too easy to cause more harm than good by using the wrong treatment. If one cannot distinguish the level of hypothermia through visible signs and symptoms, then he should assume severe hypothermia. Always remember, gentle handling, insulation, no alcohol, coffee or tea, and don't try to re-warm a victim in a hurry. Any method which will re-warm a victim in a hurry in the field will likely cause further complications, if not death. Always act on the premise that "no one is dead until warm and dead."

Causes and Risk Factors of Hyperthermia

(The Hot One)

Regardless of extreme weather conditions, the healthy human body keeps a steady temperature of 98.6 degrees Fahrenheit.

In hot weather or during vigorous activity, the body perspires. As this perspiration evaporates from the skin, the body is cooled.

If challenged by long periods of intense heat, the body may lose its ability to respond efficiently. When this occurs, a person may experience hyperthermia. In other words, hyperthermia occurs when body metabolic heat production or environmental heat load exceeds normal heat loss capacity or when there is impaired heat loss.

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Health Factors That Increase Risk

The temperature does not have to hit 100 degrees for a person to be at risk. Both one's general health and/or lifestyle may increase a person's chance of suffering a heat-related illness.

Health factors which may increase risk include:

- poor circulation
- inefficient sweat glands, and changes in the skin caused by the normal aging process
- heart, lung and kidney diseases, as well as any illness that causes general weakness or fever high blood pressure or other conditions that require changes in diet

For example, people on salt-restricted diets may increase their risk of being unable to perspire, caused by medications including diuretics, sedatives and tranquilizers, and certain heart and blood pressure drugs.

Other factors include being substantially overweight or underweight, and drinking alcoholic beverages.

Lifestyle factors that can increase risk are:

- unbearably hot living quarters
- lack of transportation - which prevents people from seeking respite from the heat in shopping malls, movie houses, and libraries
- overdressing - because they may not feel the heat, older people may not dress appropriately in hot weather
- visiting overcrowded places - trips should be scheduled during non-rush hour times
- not understanding weather conditions - older persons at risk should stay indoors on especially hot days.

Symptoms of Hyperthermia

The two most common forms of hyperthermia are heat exhaustion and heat stroke. Of the two, heat stroke is especially dangerous and requires immediate medical attention.

Heat stress occurs when a strain is placed on the body as a result of hot weather.

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Heat fatigue is a feeling of weakness brought on by high outdoor temperature. Symptoms include cool, moist skin and a weakened pulse. The person may feel faint.

Heat syncope is a sudden dizziness experienced after exercising in the heat. The skin appears pale and sweaty but is generally moist and cool. The pulse is weakened and the heart rate is usually rapid. Body temperature is normal.

Heat cramps are painful muscle spasms in the abdomen, arms or legs following strenuous activity. Heat cramps are caused by a lack of salt in the body.

Heat exhaustion is a warning that the body is getting too hot. The person may be thirsty, giddy, weak, uncoordinated, nauseated and sweating profusely. The body temperature is normal and the pulse is normal or raised. The skin is cold and clammy.

Heat stroke can be life-threatening and victims can die. A person with heat stroke usually has a body temperature above 104 degrees Fahrenheit. Other symptoms include confusion, combativeness, bizarre behavior, faintness, staggering, strong and rapid pulse, and possible delirium or coma. High body temperature is capable of producing irreversible brain damage.

Diagnosis of Hyperthermia

Diagnosis is based on the medical history (including symptoms) and physical exam.

Treatment of Hyperthermia

If the victim is exhibiting signs of heat stroke, emergency assistance should be sought immediately. Without medical attention, heat stroke can be deadly.

Heat exhaustion may be treated in several ways:

- get the victim out of the sun into a cool place, preferably one that is air conditioned
- offer fluids but avoid alcohol and caffeine - water and fruit juices are best
- encourage the individual to shower and bathe, or sponge off with cool water
- urge the person to lie down and rest, preferably in a cool place

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BGMA TIPS!

Prevention hyperthermia is relatively straightforward: Use common sense in avoiding excessive activity in situations in which heat is present. Adequate intake of fluids before, during and after exercise in any situation also is essential.