

**Below information is for reference only:**

### **Means to Seek Help in the Wilderness**

- Give first aid to the injured in the mountains.
- Send out continuous international distress signal (see below) until the arrival of a rescue team.
- If possible, at least one member should stay behind to accompany and look after the injured while the other two should go together to seek help.
- To avoid delay in rescue, the person who goes to seek help should write down the essential information to reduce the inaccuracy of the distress message delivered by him due to tension and his unclear verbal communication.
- Essential information to be provided while seeking for help:
  - 1) Nature/cause of accident
  - 2) Time/location of accident
  - 3) Location/Grid reference/the number of the nearest distance post
  - 4) Terrain/special landmarks in the vicinity
  - 5) Personal details of the injured including his name, age, sex, telephone number and address
  - 6) Extent of injury
  - 7) First aid given
  - 8) Weather condition
  - 9) Condition/Intention of other members
  - 10) Other relevant information

### **International Distress Signals**

Send out six long blasts within one minute; pause for one minute and repeat the same. Don't stop until the rescue team comes (keep on giving out the signals even if the rescue team has discovered you from a far distance so that the rescuers can identify your exact position).

### **Ways of Sending Signals**

- 1) Blowing a whistle
- 2) Reflecting light with a mirror or metal sheet
- 3) Flashing with your torch light at night
- 4) Waving colorful or shiny clothes to attract attention

### **SOS Distress Signal**

If possible, use stones or tree branches to form the characters of SOS (each at least 6x6m) on a flat and open space.

## Distance Post and “Your Location” Map Coordinate

The Agriculture, Fisheries and Conservation Department has erected distance posts at about 500m intervals along all long-distance hiking trails (MacLehose Trail, Lantau Trail, Hong Kong Trail and Wilson Trail) as well as all country trails for users to identify their location. In case of emergency, they can state their position by referring to the number on the nearby distance post or the coordinates marked at the location map, thus facilitating search and rescue operation.

“50222 SMS / GPS Hiker Tracking Service”: Hikers can punch in the numbers of distance posts they see along the trail and send them to 50222 via SMS or open the GPS Hiker Tracking Services of the “Enjoy Hiking” mobile phone application. In case of accidents, rescue parties can locate the hikers based on the data. Details please refer to the following websites:

[http://www.cahk.hk/50222SMS/50222\\_SMS\\_Eng.htm](http://www.cahk.hk/50222SMS/50222_SMS_Eng.htm)

[http://www.cahk.hk/hiker\\_tracking\\_service/eng.html](http://www.cahk.hk/hiker_tracking_service/eng.html)

Emergency call: 999/112

## Air Quality Health Index

Participants must pay attention to the announcement from the radio / TV stations on AQHI, and respectively take special notice of the following advice issued by the Environmental Protection Department (EPD) when the AQHI reaches 8-10/10+:

### **8-10**

Persons with existing heart or respiratory illness (such as coronary heart and cardiovascular diseases, asthma, chronic bronchitis and chronic obstructive airways diseases) are advised to reduce to the minimum outdoor physical exertion, and to reduce to the minimum the time of their stay outdoors, especially in areas with heavy traffic.

### **10+**

Persons with existing heart or respiratory illness (such as coronary heart and cardiovascular diseases, asthma, chronic bronchitis and chronic obstructive airways diseases) are advised to avoid outdoor physical exertion, and to avoid staying outdoors, especially in areas with heavy traffic.

Please visit [www.epd.gov.hk](http://www.epd.gov.hk) for details on AQHI.

## Metabolic or Electrolyte Disturbances

- When having strenuous exercises, the heat energy generated by your body is 15 to 20 times that of the resting mode. Your body will sweat to dissipate the heat energy by evaporation.
- When sweating continuously, the body will have dehydration easily. This will lead to a decrease of blood volume and affect the blood supply to muscles. Without sufficient blood supply, there will be inadequate oxygen supply to the muscles (hypoxia). Muscle strength and endurance will deteriorate accordingly. If the condition is not treated appropriately, this will lead to muscle spasms (heat cramps), and even heat stroke.
- Replenish 150-250 ml water every 10-15 minutes (Rehydration) will help to prevent the decrease in blood volume, the acceleration of heartbeat and temperature.
- During exercises, depending on exercise level and weather, water will be lost continuously. Normally, your body will lose 1-1.5 liters of water by sweating, and even as high as 3.5 liters or above. Every 500ml of sweat carries away 200 calories and salt (mainly sodium salt). Without replenishment, the sodium level in blood will decrease, leading to possible problems of hyponatremia.

### **Symptoms**

The sufferer will experience dizziness, exhaustion, muscle spasm, unconscious and convulsion.

### **Management**

- You should stop racing once you experience above symptoms.
- Drink beverages containing electrolytes to replenish water and salt.
- If the patient is confused and unconscious, no oral route for rehydration should be allowed. Replacement of body fluid by intravenous infusion of normal saline is indicated for severe case.

### **Safety Guidelines**

- To have appropriate rest and do not overload oneself during the race.
- As you will continuously dissipated energy during the long race, one has to drink water or eat some light food regularly from time to time to replenish the water and energy lost.
- Do not drink only when you feel thirsty. Ideally, you should drink 3-4 liters of water during the race. The exact amount depends on temperature and humidity.
- Remember, sufficient nutrition brings the best performance. Optimal hydration status keeps your muscles away from easy fatigue and maintains oxygen perfusion to muscle. This is very important to elevate your performance level.

## **Blood Glucose Level Imbalance**

- During the long marathon race, one should have sufficient amount of carbohydrates to replenish the glucose used for energy metabolism during tremendous exercise.
- Participants should take light food or beverages with glucose. When the glucose is absorbed in gut and diffused into circulation, it will be transported to muscle tissues directly for energy utilization rather than glucagon metabolism.
- For a normal person, the storage amount of glucose is less than 1200 calories. This amount can easily be used up during the race. Please be reminded that inadequate glucose level will affect your performance in the race directly.

### **Hypoglycemia**

If participants have not taken food with sufficient calories and with little energy reserve, in addition to significant energy dissipation during the race, this will lead to hypoglycemia.

### **Symptoms**

Clinical presentations includes paleness, clammy skin, stammering, hasty and shallow breathing, tachycardia, exhaustion, dizziness, shivering, muscle spasm, and convulsion in severe case.

### **Management**

- When you experience the above symptoms, stop racing right away.
- Drink beverage with glucose.
- Massage muscles suffering from cramps lightly.
- For those patients with extremely low glucose level, ensure the patient airway and adequate breathing with high concentration of oxygen if patient getting confused or fall unconscious. Depending on the severity, emergency medical treatment with intravenous injection of high concentration glucose may be indicated.

### **Safety Guidelines**

- Before the event, make sure you have taken food with carbohydrates and enough calories to cover for the energy used. Please replenish with glucose drink during the course of the race.

## Mountain Torrent

The devastating power and speed of mountain torrent should never be underestimated. A small stream may swell and converge into raging torrents in heavy rain and wash away travelers, resulting in casualties within minutes.

### **Safety Guidelines**

- Avoid hiking when the weather is unstable, especially when the rainstorm warning signal is hoisted.
- Don't hike along a water course when it rains. Leave the water course without delay and head for a high spot ashore.
- Don't stay at the water course for a rest, especially at its lower reaches.
- Don't wade in the stream after heavy rain.
- Never attempt to cross any inundated bridges. In case of heavy rain, leave the water course right away.

### **Emergency Measures**

- Rapid flows, turbid water with sand and mud are early signs of torrents. Leave the water course without delay.
- If you fall into a rapid flow, grip or hold on to the rocks, branches or vines near the banks; try to get ashore and leave the river course right away.

## Landslide

Landslides are not uncommon when a large amount of rainwater has soaked a natural or artificial slope during a downpour or after a few days of heavy rain.

### **Safety Guidelines**

- Avoid going near or staying around steep slopes during heavy rain or after a few days of heavy rain.
- The oozing out of a large quantity of muddy water from the base or the weep holes of a slope indicates that the slope is saturated with water.
- Exposure of inner soil of the slope and appearance of new cracks on the slope are early signs of a landslide. Keep away from such slopes.
- Don't proceed by stepping on loose mud if landslide blocks your way; retreat or seek another safe route to leave the scene right away.

### **Emergency Measures**

- Unless you are fully equipped and properly trained, don't try to resume life buried in a landslide. You should call for a fully equipped rescue team to avoid further casualties.

## Hill Fire

Hill fire advances rapidly upward and windward on a steep grass slope in dry weather. Never underestimate its devastating power. During the outbreak of a hill fire, all visitors should note the advisory and warnings issued, and follow the instruction of on-site staff to stay away from the hill fire-affected area. Do not enter an area that might be affected by an occurring hill fire to ensure safety.

### **Safety Guidelines**

- If the fire danger warning is red, handle kindling materials with great care.
- Except at designated barbecue sites or campsites, never light a fire within country parks. Smokers should refrain from smoking; all cigarette-stubs or matches should be totally extinguished before discarding into litter boxes.
- Hill fire is difficult to detect in daytime. Always pay attention to flying ashes or burnt smell. If a hill fire is spotted, leave the fire scene right away.
- It is difficult to assess the spreading of hill fire. Don't risk continuing your journey in case of a fire nearby or you may get trapped in the fire.

### **Emergency Measures**

- Don't panic and keep calm.
- Never attempt to attend a hill fire indiscriminately.
- Note the following for a quick evacuation from the scene of fire:
  - 1) The direction in which the fire spreads - avoid escaping in the same direction of the prevailing wind.
  - 2) The gradient of the paths nearby - Choose the one which is easiest for escape. It is easier and quicker to escape through existing paths.
  - 3) The height and density of the vegetation nearby - Find a place with less vegetation for escape.
- If the fire is imminent and there is no way out, you should cover your exposed skin with wet clothing and then make for the burnt area. This can minimize the chance of getting injured.
- Never run uphill if the situation permits.
- Don't run into shrubs or grass grown area, fire usually spreads rapidly and the temperature may soar in these areas.

## Lightning Stroke

Lightning normally strikes at the highest point of an object and the electric current is conducted to the ground via the least resistant path. Hikers attacked by lightning usually have the symptoms of muscle spasm, scalds, suffocation and cardiac arrest.

### **Safety Guidelines**

- Listen to the weather bulletin. Avoid hiking when the weather condition is unstable, especially when the thunderstorm warning signal is hoisted.
- Wear shoes or boots with rubber soles in outdoor areas.
- Don't touch wet substance.

### **Emergency Measures**

- Don't stand at hilltop or near any object with high conductivity. As trees and poles can easily be struck by lightning, give them a wide berth as far as possible.
- After striking an object, the electricity current of lightning will spread through the ground. Therefore, don't lie on the ground, especially wet ground surface.
- Squat and minimize the contact area with the ground as far as possible.
- Stay away from iron fences or other metal objects. Remove all metal objects (e.g. gold ornaments) from your body.
- Take shelter in a building whenever possible.
- Don't swim or engage in other water sports. Leave the water and seek shelter right away.
- Don't touch any antenna, water pipes, iron mesh or other similar metal installations.
- Don't touch any inflammable materials, such as kerosene or liquefied petroleum gas.

## Getting Lost

It is easy to get lost during bad weather or when not properly prepared.

### **Safety Guidelines**

- Choose only maintained paths that are clearly way marked and plan the route before setting out carefully.
- Pay attention to the current weather bulletin and avoid hiking if the weather is bad.
- Remember to bring all necessities including maps, compass, drinking water, food, torch, rain gear, radio, first-aid kit, whistle, mobile phone, notebook and pen.

### **Emergency Measures**

- Finding your location with the use of a compass and a map.
- Recall the route you have covered and retrace your steps to your original position. If this is not possible, Stay Put and wait for rescue.
- Don't go further; this would waste your energy.
- If you must advance further, take note of all the paths that you have tried. Avoid steep ravines as it is not easy to locate oneself in this topography.
- Head for a high spot if you fail to identify your location. It is easier to identify directions there and to be discovered by the rescue team.
- In case cold weather sets in but you do not have sufficient warm protective clothing or if thunderstorm or hill fire occur, leave the high spot until the situation improves and go back to the high spot again and wait for rescue.
- Give out international distress signals.



## Heat Stroke

Heat stroke is caused by one's inability to regulate body temperature through transpiration at high ambient temperatures. The victim feels hot, dizzy, uneasy and even becomes unconscious. When the temperature exceeds 40C, the victim's skin will be dry and flushed; breath and pulse rate will increase. In some serious cases, the victim will suffer from shock. Lower his body temperature and seek medical assistance right away.

Overheat of the body will also lead to heat exhaustion which usually occurs when one is engaging in sports in hot humid weather, especially when one fails to replenish his body fluid and salt lost through sweating. The symptoms are exhaustion, headache, dizziness, nausea, muscle spasm, paleness, clammy skin, rapid but weak breath and pulse.

### **Safety Hints**

- Have good rests during the journey. Don't overwork as this would lead to exhaustion.
- Avoid prolonged exposure to direct sunlight. Drink lots of water.

### **Emergency Measures**

- Move the victim to a cool shaded place. Remove his clothing and have him lie down with feet elevated; give him lots of fluids if he is conscious. Avoid the victim being surrounded by people. Continue to replenish him with drinks and seek medical treatment right away.
- If necessary, employ other body-cooling techniques like immersion in water, wetting clothing and fanning until the symptoms disappear.
- If the victim sweats heavily and convulse, serve him with salt water in the ratio of one tea spoon of salt to one liter of water.

## Hypothermia

It is caused by drop of body temperature due to lack of sufficient clothing in a cold place. Even in summer, rapid drop in temperature due to sudden cold rain or rainstorm will also cause hypothermia.

### **Symptoms**

Fatigue, exhaustion, clammy skin, stumbling, shivering, muscle spasms, stammering and hallucinating, etc.

### **Safety Guidelines**

- Have a good sleep on the night before the journey.
- Don't join the journey if you are not feeling well.
- Have a nutritious meal before setting out. Have high energy food like chocolate during the trip.
- Bring warm protective and rain-proof clothing and a spare set of clothes for change.
- Rest at intervals.
- Don't overload yourself with bulky object.
- Don't overstrain to conserve energy.

### **Emergency Measures**

- Seek refuge from the rain and change wet clothes right away.
- Cover your head, face, neck and body with clothing or sleeping bag to keep warm.
- Take hot drinks and high calorific food to maintain body temperature.

## Dangerous Plants

Some common plants in the wilderness are harmful to hikers. For example:

Wax Tree - skin allergy Prickly Ash- scratches Wild Fruits - Poisonous; can be fatal if eaten.

### **Safety Guidelines**

- Avoid going into dense bushes.
- Wear long sleeved clothes and long trousers and bring a pair of gloves.
- Protect your head and face or exposed skins with handkerchief or clothing if you have to pass through a bush.
- Don't touch the Wax tree.
- Beware of thorns when gripping on a plant.
- Don't attempt to eat wild fruits/mushrooms.

### **Emergency Measures**

- Seek immediate medical treatment if skin allergy occurs after touching a plant or you are poisoned by wild fruit.

## **Snakebite**

Common venomous snakes in Hong Kong include banded krait, many - banded krait, king cobra, cobra, bamboo pit viper. They are more active in spring, summer and autumn.

### **Safety Guidelines**

- Wear long trousers and ankle boots.
- Use only the maintained paths. Don't venture into new paths or walk into overgrown area or mixed forest.

### **Emergency Measures**

- If you see a snake, keep calm and still. Let the frightened snake run away.
- Note the following in case of snakebite:
  - 1) Don't cut, suck or wash the wound. Keep the victim lie down at rest. Avoid alcoholic drinks.
  - 2) Don't elevate the wound or make unnecessary movement.
  - 3) Pacify the victim and rush him to a hospital for treatment. If possible, identify the type, color and band of the venomous snake. If the snake responsible for the bite has been caught, bring it along to the hospital so that the right antivenin can be used.

## **Bee Sting**

Bees, hornets or wasps are not uncommon in the countryside. Be careful not to touch their combs, this would avoid being attacked and stung by their swarm.

### **Safety Guidelines**

- Don't venture into new paths; avoid going into bushes and ferns where insects and wasps inhabit.
- Don't disturb combs. Never strike bushes with branch or stick.
- Spray insect-repellent on your body and clothes.
- Avoid using aromatic body lotion.

### **Emergency Measures**

- If there are only one or two hornets hovering above, ignore them and keep going as usual. If there is a comb blocking the way, circumvent it and proceed.
- When attacked by a swarm of hornets, squat still and cover your head and neck with outerwear for protection, or lie curled on the ground and evacuate slowly after the swarm has dispersed.
- If the sting is left in the wound, remove it with a pair of forceps. Don't squeeze the poison gland to prevent any residue poison from entering the body. You may apply a cold compress and apply it lightly to the wound to soothe the pain temporarily.
- Seek medical treatment right away if stung seriously.

## Mosquito Bite

Mosquitoes are common in the countryside. Mosquito bites cause temporary itching. However, one may be infected with dengue fever when being bitten by Aedine mosquitoes (*Aedes albopictus*) carrying dengue virus. Dengue fever is an acute mosquito-borne infection caused by the dengue viruses. It is transmitted to humans through the bites of infective female Aedinemosquitoes.

### **Safety Guidelines**

- Wear loose, light-coloured long-sleeved tops and trousers, and apply DEET-containing insect repellent on clothing and exposed parts of the body.
- Avoid prolong stay under tree, in grass bushes and hidden places.
- Do not dispose empty boxes, soft drink cans and plastic bags which can retain stagnant water.
- Do not store empty barrels or bottles for water storage purposes in the countryside.

### **Emergency Measures**

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For more information, please refer to the website of Centre for Health Protection:

<http://www.chp.gov.hk>