

Sleeping pills, sedatives and alcohol should not be used at altitude as they tend to decrease breathing and lead to AMS.

It seems that drinking 3-4 liters of fluids (boiled water, iodinated water, soup, etc.) per day to avoid dehydration helps in the acclimatization process.

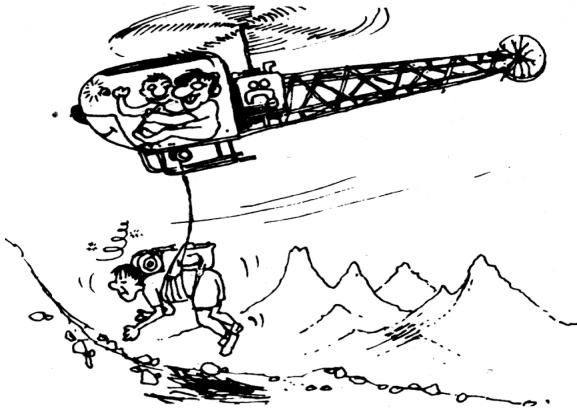
Consider use of the drug Acetazolamide (Diamox) as a treatment for mountain sickness. Talk to your physician about its use and side effects.

In addition other drugs are Nifedipine which is used for HAPE and Dexamethasone which is used for HACE. But remember not to take medicines indiscriminately.

Sometimes the side effects can be lethal. You should also know about the Gamow bag which is used at our 2 aid posts at Pheriche and Manang. When blown up, these bags simulate pressures of lower altitude and the patient inside benefits significantly.

No special precautions are needed on descent.

HELICOPTER RESCUE



Evacuation by helicopter in these days has become more common due to the advent of private helicopter company and easy access of communication. However, someone in Kathmandu must guarantee the payment of the flight before the rescue. If you are trekking with a Kathmandu based trekking agency, send rescue request to them and they will arrange the flight. If you are trekking on your own, send the message to your

embassy. Send your name, nationality, location and details of the injury or sickness (that is: altitude illness, frostbite, heart problem, fracture, dysentery etc.). It almost takes at least few hours to twenty-four hours to arrange a rescue, including passing of message.

Now a days, the private airlines provide effective helicopter services to evacuate trekkers in an emergency. Arranging helicopter rescues through private airlines may be prompt but the charges are bit higher.

One going to trekking/mountaineering should have insurance policy that covers helicopter evacuation. **If your country has an embassy in Kathmandu register with them before you trek and record the details of insurance, if you have insurance it will speed up the rescue process.** If your country does not have an embassy or consulate in Kathmandu, and you are trekking on your own, you will have trouble getting rescued unless you arrange something in advance. One possibility would be to arrange necessary process with a responsible trekking agency before you go or buy insurance policy in Kathmandu.

HIMALAYAN RESCUE ASSOCIATION NEPAL

The HRA is a voluntary non-profit organization which strives to reduce casualties in the himalayas of Nepal. It was founded in 1973 and now operates two rescue posts along the two most popular trekking routes. One is located in Pheriche (4250 m) on the way to Everest, and the other is in Manang (3550 m), just before the Thorung La Pass on the Annapurna circuit. Both posts are staffed by volunteer doctors during the two main trekking seasons.

HRA has been conducting Medical Camp at the Everest Base Camp (5350 m) since the Spring Season 2003. Everest Base Camp (EBC) Medical Centre provides medical facilities to the climbers, support staff & visitors at EBC.

The HRA operates solely on donations. While in Kathmandu, visit our Kathmandu office at Dhobichaur, Lazimpat, to obtain more information about trekking, or to make a donation. If you have any questions do not hesitate to ask our Office Chief Executive, Mr. Prakash Adhikari (Telephone: 4440292, 4440293). Have a good trek and enjoy the magnificence of the Himalayas.

EMERGENCY SERVICES FOR THE VISITORS

Police Emergency	100/110/122
Nepal International Clinic (Lal Durbar)	4434642/4435357
Teaching Hospital (Maharajgunj)	4412808/4412303
Patan Hospital (Patan)	5522266/5522295
CIWEC Clinic	4424111
Ambulance Service	102
Tourish Polic	4247041

EMBASSY

British Embassy	4411281/4410589
US Embassy	4007200
German Embassy	4412786
French Embassy	4418034/4412332
Japanese Embassy	4426680
Australian Embassy	4371466/4371678
Israel Embassy	4411811/4413419
Finland Embassy	4417221/4416636
Switzerland Embassy	5549225

CONSULATES

Austrian Consulate	4434690/4434648
Consulate of Belgium	4418922
Office of the Embassy of	
Canadian Consulate	4415193
Consulate of Mexico	4420018
Consulate of the Netherlands	5523444/5522915
Consulate of New Zealand	4412436
Consulate of Italy	4252801/4252801
Consulate of Denmark	4416177

MOUNTAIN SICKNESS AND OTHER HAZARDS IN THE NEPAL HIMALAYA



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INTRODUCTION

A few years ago most people who came to visit the Himalaya already had a lot of experience hiking in their home countries. These people needed to be warned of the subtle hazard of Acute Mountain Sickness (AMS), but in general, they were aware of mountain safety. This fact is no longer true, as many people start into the high mountains of Nepal with very little thought for the difficulties they might encounter. This pamphlet is intended to serve as a brief reminder of several important points you should think about before you go trekking.

THE TRAILS

The trekking trails in Nepal vary from wide, rode-like avenues to narrow, slippery paths built out over enormous drops. In many places, a fall from the trail would be fatal. One must pay attention at all times to where you are placing your feet. Be especially careful not to move while looking through the view finder of your camera. Sometimes your routes will become confusing and you may take a wrong path. If you are tired, as one often is at altitude or after a long day, there is a great temptation to try to climb up or down a steep hillside to regain the correct trail. Several people have died from a long fall while trying to do this and others have been painfully injured. Retrace your steps to find the correct path rather than moving cross-country. **Never trek alone. If you have no friends available to trek with consider hiring a guide or porter to trek with you.**

THE WEATHER

Nepal has the widest altitude range of any country on Earth, from 200 meters in the Terai to 8848 meters on the top of Everest. Each altitude will have its own weather problems, from tropical heat to arctic cold. It is often difficult to plan for bitter cold winds and snow while walking past banana trees in the hot sun. In the main trekking seasons in the Spring and Fall, the weather is often stable, and even the high passes may be free of snow and relatively easy to traverse at times. Those trekkers who encountered an easy day at altitude may spread the word that boots and warm clothing are not

required. This is a mistake! Sudden storms can occur at any time, dumping one or two meter of snow on the passes. At that point, anyone with simple running shoes will not be able to proceed, and may even be stranded for a number of days. Frostbite is a constant risk if one walks in snow at high altitude.

If you trek in the winter, you must be prepared for cold and snow. If you trek in the monsoon you might be faced with slippery trails and difficult river crossings but there are much less people on the trail.

You are heading into the world's highest mountain range. Be prepared for changes in temperature and weather !

FINAL PREPARATIONS

If your trekking route will go over 4000 meters, take a warm sleeping bag, boots adequate for snow, a warm jacket, and good quality sunglasses. If you are hiking with porters, make sure they have sunglasses, warm clothing and shoes if they are trekking over high passes. Since most trekking routes do not have medical care for most of their distance bring an adequate first aid kit.

ALTITUDE

The Himalaya begins where other mountain ranges leave off. Everest Base Camp is at the foot of huge mountains, yet it is 1000 meters higher than the highest point in Europe. Your body can adjust to these altitudes, but only if given enough time. **Being in a hurry in the mountains of Nepal can be deadly!** It also seems that excessive exertion at altitude (e.g. carrying a heavy pack) may predispose some people to altitude illness. So it may be advisable to carry a light pack and use a porter (they are not expensive).

Acclimatization is the word used to describe the adjustments your body makes as it ascends. You should adjust your schedule so that you average no more than 300 meters per day of ascent above 3000 meters.

If you fail to allow time for acclimatization, you may develop symptoms of AMS. The AMS may be mild enough to go away with a day's rest or if ignored may lead to death. All that is required to ensure a safe trek is basic



awareness of AMS, and a willingness to rest or descend if you develop symptoms. As a result of the growing awareness of altitude problems there is only one death from AMS in Nepal out of every 30,000 trekkers.

Even these deaths would be avoidable if everyone knew how to respond to AMS. There are no reliable figures for casualties among porters.

RECOGNIZING ACUTE MOUNTAIN SICKNESS

Acute Mountain Sickness (AMS) can develop at any altitude over 2000 meters. The early symptoms are headache, extreme fatigue, and loss of appetite. Some people become breathless at rest. AMS is the result of fluid accumulating in parts of the body. Where it does not belong: in the brain, in the lungs, or both. When mild symptoms develop, it is a signal that you must stay at that altitude until symptoms have gone away. **Never ascend with any symptoms of AMS!** Usually within one or two days you will feel well and can continue your trek.

If you are resting at the same altitude and your symptoms are becoming worse, then it is necessary to descend. Worsening symptoms of AMS include increasing tiredness, severe headache, vomiting and loss of coordination. These are signs of High Altitude Cerebral Edema or HACE. **HACE can lead to unconsciousness and death within 12 hours if progressive symptoms are ignored.** Increasing shortness of breath, cough and tiredness are signs of High Altitude Pulmonary Edema

or HAPE. HAPE can also be rapidly fatal if ignored. For both HACE & HAPE descent is mandatory.

A person suffering from AMS may not have clear thinking and may have to be forced to descend. Even if someone is willing to descend they should never be allowed to descend alone. Keep descending until the person shows some sign of improvement, usually after 300-500 meters of descend. Even if the diagnosis is not clear, but might be AMS, you should descend. **You can always re-ascend when the person feels better.**

It is best to start descending while the person who is ill can still walk. If the person can no longer walk, a yak or horse might be obtained. Porters can often be found to carry a sick person down. **Do not wait for a helicopter.** If you choose to administer oxygen or medications do not delay the descent to watch for improvement.

In summary, if you are not doing well at altitude, most likely you have some mild symptoms of AMS. Rest at the same altitude until you feel well. If you are getting worse at the same altitude, descend to at least the last point at which you felt well. If you are not sure of the diagnosis, err on the side of being too cautious. Remember severe altitude sickness is **entirely** preventable if you follow these guidelines.

A FEW MORE POINTS ON AMS

The HRA does not recommend taking any drug to try and prevent AMS for the usual trekking routes in Nepal. It is safer to rely on a planned slow ascent.

You should not plan to go to high altitude if you have known heart disease, difficulty breathing at sea level or are pregnant (recommended to stay below 3600 meters). For other chronic medical conditions consult your physician.

PHYSICAL FITNESS DOES NOT PREVENT AMS

Do not expect everyone in your party to acclimatize at the same rate. You may have to wait an extra day for some members or be prepared to split the group.

Children are more susceptible to AMS and need to be watched closely. It is risky to trek to high altitude with infants who cannot tell you when they are not feeling well.