



CASUALTY EVACUATION PLAN

This document provides each trekking team Medical Officer with a resource to aid decision-making and organisation of casualty evacuations. The two broad evacuation options are: a helicopter to Kathmandu or an overland descent to the trailhead followed by vehicle transfer to Kathmandu. Kathmandu and Pokhara are roughly equidistant to the trailhead. However, Kathmandu arguably has the better medical facilities, the international airport (should repatriation be required), and the Sherpa Brothers Treks and Expedition Pvt. Ltd. office where assistance will be available. Therefore, casualties should preferably be evacuated to Kathmandu.

Evacuation methods

Method	Benefits	Limitations	Logistics
Walking	Immediately available	Unsuitable if acutely ill, in cases of HAPE, if unsteady on feet, with lower limb injuries	Casualty to be accompanied by at least two team members Walking poles may aid descent
Basket	Available from porter Reasonably rapid descent over uneven terrain	Discomfort	
Stretcher	Available at basecamp Useful for transportation of an acutely ill/injured casualty & those requiring immobilization e.g. suspected spinal injury, long bone fracture etc. Facilitates continuous patient monitoring	Packaging time Difficult to navigate over uneven terrain or narrow tracks Exposure to elements Decubitous ulcers Slow progress	Requires a team of at least 16 people (two teams of 8 people to rotate) Each trekking team will have the support of approximately 30 Nepali staff (18-20 porters)
Horse	Usually available for hire in villages Useful to speed up long overland evacuations where a slow unaided walk is the reasonable alternative	Not immediately available Risk of injury e.g. fall Helmets may not be available	Horses are available for hire as far as Samdo but could be walked up to basecamp if time permits
Motorized	Rapid evacuation	Lack of availability	

vehicle		Very few roads	
Helicopter	Rapid evacuation Limits discomfort Facilitates speedy access to definitive medical care as an ambulance may be organised to transfer casualty from airport in Kathmandu/Pokhara to hospital	Adverse weather, darkness, hazardous terrain, difficult access to & egress from incident scene etc. limit availability Organisation requires more time	Helicopter landings are feasible at Samagaon, Samdo, basecamp and Dharamsala There may be suitable landing sites at lower altitudes

Approach to organising a casualty evacuation

It is impossible to provide a casualty evacuation plan for all eventualities. Choosing the most appropriate means of evacuating a casualty requires significant thought. In the event of requiring a casualty evacuation, the following should be considered:

- Severity of illness/injury (can you “stay and play” or is the patient critically ill/injured requiring you to “load and go” i.e. “hike vs helicopter”)
- Rescue and medical skills of rescuers
- Physical/psychological condition of rescuers
- Availability of equipment and/or help for the rescue
- Danger/difficulty of evacuating the victim(s) by the various methods available to both victim(s) and rescuers
- Time, distance, terrain, weather
- Cost

Guidance

- Remember that as a trekking team Medical Officer, your priority is the assessment and treatment of your casualty
- Involve your fellow trekking team members (including the casualty if possible) in decision-making and initiation of an evacuation
- No evacuation should take place without attempting to first establish radio contact with basecamp and Simon Currin (who will also be in possession of a satellite phone). It might also be possible to establish communication with basecamp, Simon Currin or another trekking team using your mobile phone. Both basecamp and Simon Currin must be informed of the need for evacuation at the earliest opportunity and will be able to proffer invaluable support

- Delegate completion of casualty and critical incident report forms to a fellow trekker. These will aid you when asked to provide information about your location, the type of incident, hazards, access to and egress from the incident scene, the illness/injury and the personnel and equipment present and required. These forms should accompany the casualty being evacuated since they will be of use to medical personnel receiving the evacuee
- No individual (local staff included) should ever descend alone. Carefully consider who will descend with the casualty. What skills do they have? They should be accompanied by someone who speaks their language and understands their problem. All participants should descend with either a sherpa or a reliable porter at the very least. You should also consider asking another team member to accompany the victim(s) (except for helicopter evacuations, where often the evacuee will be flown back to Kathmandu/Pokhara alone)
- Pack the resources which the evacuee will subsequently need including
 - Money, credit card, passport and travel insurance details
 - Prescription medications
 - Casualty and critical incident report forms
 - Sleeping bag, waterproofs, warm layers etc.
 - Food and water
- If it is possible that an evacuee will meet another of our trekking teams as they ascend, please request the Medical Officer to re-assess the casualty. Alternatively, it might be possible to evacuate a casualty into the care of another trekking team camping at a lower altitude
- Always have a plan B and even a plan C. Plans B and C may be unattractive options but are a vital if plan A fails
- Wherever possible evacuations for severe AMS, HAPE and HACE should be physically assisted, as further exertion can exacerbate the patient's clinical condition. Those individuals with AMS will need to be assisted at first but may be able to walk unaided at lower altitudes once their signs and symptoms have improved with descent
- Ensure the safety and wellbeing of the rest of your team e.g. if several trekking team members are suffering symptoms and signs of AMS, consider a rest day or descent for all

Available medical facilities

Kathmandu:

CIWEC Clinic (preferred option)

Location: P.O. box 12895, Lazimpat (opposite British Embassy), KATHMANDU, Nepal (approximately 10 minutes via motorized transport from Thamel or 30 minutes from Tribhuvan International Airport)

Tel.: +977-1-442 4111/+977-1-442 4242/+977-1-443 5232

E-mail: info@ciwec-clinic.com

Website: www.ciwec-clinic.com

Notes: reputable. Employs doctors from overseas. Facilities include ambulance service, medical evacuation assistance and repatriation, dermatology department, 24/7 emergency service (including emergency dentistry), immunization, inpatient care, laboratory, minor surgery, obstetrics and gynaecology, ophthalmology, orthopaedics, paediatrics, psychiatric, radiology services (X-ray and USS), travel medicine.

Nepal International clinic

Location: GPO box 3596, Lal Durbar (opposite Royal Palace), KATHMANDU, Nepal (approximately 30 minutes via motorized transport from Thamel or 30 minutes from Tribhuvan International Airport)

Tel.: +977-1-443-4642/+977-1-443-5357

E-mail: nic@naxal.wlink.com.np/nepalinternationalclinic@gmail.com

Website: www.nepalinternationalclinic.com

Notes: reputable. Founded by Dr. Buddha Basnyat. Specialises in travel and mountain medicine. Services include general and internal medicine, immunization, dermatology, gynaecology, orthopaedics, laboratory and radiological imaging. Open between 09:00 – 17:00 inclusive on Sunday - Friday. On Saturday office, vaccination services, nursing care and laboratory services available from 09:00 – 17:00 (lunch hour 13:00 – 14:00) but doctor available only by appointment. Advise to telephone if medical attention required out of hours.

Patan Hospital

Location: GPO box 252, Patan, KATHMANDU, Nepal

Tel.: +997-1-552-2295

E-mail: info@patanhospital.org.np

Website: www.patanhospital.org.np

Notes: thought to be the best hospital in the Kathmandu valley. Run by government and Patan Academy of Health Sciences. Western missionaries volunteer here. 450 beds. 5 bed ICU. Services include dentistry, emergency care delivered 24/7, inpatient medical and surgical care, obstetrics and gynaecology (including delivery suite), orthopaedics, paediatrics, pathology and radiology.

Pokhara:

Manipal Hospital

Location: Kahun 33700 (northern Fulbari), POKHARA - 16, Nepal (approximately 30 minutes via motorized transport from both airport and Lake Side)

Tel.: +977-6-152 6416

E-mail:

Website: <https://www.manipal.edu.np/mcoms/hospital.html>

Notes: teaching hospital and tertiary centre. 750 beds including 50 ICU (CCU, medical ICU, NICU, PICU, neurosurgical ICU) beds. Three ambulances available and heli-pad on-site. Emergency department (25 beds) and trauma centre operating 24/7. Services also include cardiology, dental surgery, dermatology, ENT, general surgery, haemodialysis, laboratory (e.g. biochemistry, blood bank, haematology, microbiology 24/7), maxillofacial surgery, medicine, medical and surgical oncology neurosurgery, obstetrics and gynaecology, ophthalmology, orthopaedic surgery, paediatrics and neonatology, paediatric surgery, 24/7 pharmacy, psychiatry, radiology (CT, MRI, USS and X-Ray), thoracic surgery, venereology.

Western Regional Hospital (?Gandaki Hospital)

Location: Ranipauwa Road, POKHARA 33700, Nepal (**approximately 20 minutes via motorized transport from both airport and Lake Side**)

Tel.: +977-1-520-066

E-mail:

Website:

Notes: good reputation. Government hospital. 350 beds.

Manaslu circuit:

Government health posts

Location:

- Lho (walk through on day 7 of trek)
- Samagau (sleep here at the end of day 7 of trek)
- Samdo (sleep here at end of day 9 of trek)

Notes: government-run clinics. Provide basic assessment and treatment of health problems encountered by local people. No inpatient facilities. Not equipped to treat altitude illness.

Basecamp:

A medical tent will be located at basecamp. This will provide:

- Additional medical resources to help re-stock group medical kits if required
- Supply of medical oxygen
- Hyperbaric bag

It has been suggested that a doctor should accompany each team attempting Larkya Peak and that those medical officers not involved should remain at basecamp to staff the medical tent and receive any casualties upon their descent.