Care and Transport of the Patient

After ensuring the team's safety, patient stabilization is the first responsibility of the field team. Next, care must be administered to the patient to correct any life-threatening trauma and to prepare for the upcoming litter evacuation. It is imperative that any foreseeable complications be attended to before the evacuation is begun, thereby ensuring the patient's safety as well as the safety of the litter bearers.

The team uses highly specialized medical equipment to render the most efficient medical care in the "off-road" situation. Equipment is designed to be lightweight and compact for easy transport by team members to difficult-to-reach locations. Most of the medical equipment used by the team is transported in medical packs. Every member of the team should possess current knowledge of the location and identification of equipment in these packs, as they may be asked to get a certain piece of equipment out of a pack by the attending medical personnel.

During a mission, the first task in patient contact is to ensure the safety of the team. This includes ensuring that the area is assessed for dangers (rockfall, loose/ protective dogs, wildlife, etc.) with each danger mitigated prior to advancing to the patient. The second task is ensuring that those with patient contact have their BSI (body substance isolation) equipment properly worn. This includes nitrile gloves, eye pro, and mask if necessary. The third task is to ensure that the patient has a patent (open) airway, is breathing, and has a pulse, and to correct any deficiencies in each of these areas. This also includes identifying any life-threatening bleeding and stopping the bleed as quickly as possible. This is commonly referred to as conducting the A, B, C's (airway, breathing, and circulation).

A major problem inherent in search and rescue operations is the time it takes to get to a patient and then evac the patient to an ambulance. A simple carryout can take 3 hours with a more technical and remote evac to take 10-14 hrs. Because of this, the likelihood of finding the patient in some degree of hypothermia is very high. Death can result in a short period of time if hypothermia is not mitigated. Hypothermia can occur in the winter but also in the summer. Any temperatures below 65 degrees should include the potential of a hypothermic patient and should include deploying and utilizing the wiggies (medical grade sleeping bag) for patient health and comfort. Patients in shock can become hypothermic in 80- and 90-degree weather. Since most patients have already been exposed to a lengthy period of cold, rewarming should be considered and begun in the field as quickly as possible. This includes placing the patient in a wiggies or on top of the bottom layer of the wiggies with the top left off or rolled onto the side of the litter. Heat packs in the armpits and groin area and use of a heat blanket may also be used for patient warming. It is imperative that heat packs not be placed directly on the skin. The heat blanket can lay over the patient's skin.

All rescue team personnel must be familiar with the risks and hazards in any "off-road" terrain. A team member must be able to avoid injury while monitoring the safety of his fellow rescuers as well as the care and safety of the patient.

TRANSPORT

EPCSAR is not equipped to transport injured or ill patients to a hospital. Generally, we evacuate our subjects to a location where they may be transported by ambulance or the subject's personal vehicle. Generally, the local ambulance service will be called to evaluate the subject and provide transport if necessary. Under most circumstances, the subject can refuse treatment and transport. Unless a patient refuses further treatment (and is competent to do so), treatment of a patient

may not be discontinued by an attending EPCSAR member until someone of equal or greater medical capabilities assumes responsibility for the care of the patient. This will usually be an ambulance crew (generally Paramedics or EMTs) but may be a flight nurse. It is important, both from a medical as well as a legal aspect, that the member exercise caution when deciding whether or not to relinquish medical responsibility for the patient.

EPCSAR does use team vehicles for litter and mobile patient transport when an ambulance is not capable of reaching the patient and road (or wide trail) access out of the area is available. S1 is capable of carrying a litter with patient up/down rough 4×4 roads to the ambulance. This requires that the back double seat be lowered into a flat configuration and the litter placed over the seat. The single back seat is left upright for an attending medical personnel to monitor the patient. Try to ensure that the patient will be transported in a heads-up manner so load the foot of the litter first for any downhill movement and head first for any uphill movement. The litter may need to be removed and replace into the right configuration if both uphill and downhill movement is required. Zofran or another anti-nausea medication should be considered for the patient but takes 20-30 minutes to become effective. Try to give the patient access to a view of the horizon to assist in avoiding nausea/vomiting. This may require placing something under the head of the litter to raise the head which will enable the patient to see out a window. The attending medical person should provide the patient with a vomit bag just in case it is needed. Mobile patient should be placed near a window if they tend to get car sick. Never place a suicidal patient near a door. Some patients may need to be placed in the front seat to avoid nausea but this should be a last resort. Placing a patient in the right front seat eliminates a co-driver capability for the driver. Only very calm, cooperative, and alert patients should be allowed in the front seat.

The Tucker snowcats are also capable of carrying a patient in a litter. The litter is placed in the backseat area with the head and foot of the litter placed into the cutouts in the vehicle body. It is almost impossible for a litter patient in a Tucker to see out a window to assist in avoiding nausea and vomiting; therefore, Zofran or other anti-nausea medication should be considered. Non-litter patients can easily be carried in the Tucker. This may require that the patient be laid across the back seat or for leg injuries placed upright with the injured leg extending across the seat. The attending medical person should provide the patient with a vomit bag just in case it is needed.

The ORVs may be used to transport a deceased person in a litter or SKED. This requires that the head and/or foot of the SKED or litter be placed on top of the door frame and therefore extends outside the vehicle. This is why only a deceased person will be transported in this manner, and preferable, only when outside the public sight. Care must still be given when transporting a deceased person so as to treat them with dignity and respect ensuring that branches, etc do not come in contact with the person. Transporting a mobile person in the ORV is simple but care must be taken to ensure patient warmth during cold weather. Snow spindrift from the tracks can come into the rear seat area through gaps in the canvas roof and sides. Always ensure the patient(s) is covered with an emergency blanket, wiggies, or wool blanket to keep them warm.

EPCSAR will sometimes call for the evacuation of a subject by helicopter. This is only done when genuine threats to life or limb exist. Aside from the considerable expense to the subject, helicopter operations in the mountains are dangerous. Helicopters do crash in search and rescue operations which can result in the death of pilots or passengers. It is not an option to be taken lightly.