

Initial Care of the Avalanche Patient During And Post Extrication

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- 1. AIRWAY.** As the head is extricated, if possible note absence or presence of an air pocket or ice mask around the face. Once access is made to the head, gently, quickly and aggressively clear the patient's airway if filled with snow, etc. As best you can take manual C-spine precautions as the extrication continues.
- 2. BREATHING.** Look, feel, and listen for breathing. If not breathing or ineffective, begin rescue breathing as soon as possible during extrication. Reassess. Continue gentle rescue breathing at 8-10 breaths/min.
- 3. CIRCULATION.** After airway and breathing have been addressed, check for a carotid pulse. You may need to check up to 1 minute in a patient with a long burial time and/or in probable severe hypothermia. With NO pulse in a fresh burial (<35 min burial time) --- begin chest compressions and continue CPR 30:2 compressions to breaths- (stop after a 20 min. trial if no response) as safe, practical, and possible. Do not initiate or continue chest compressions if there is any evidence of respiratory effort or other signs of life.

***NOTE** (backcountry setting): *If you are unable to find a palpable pulse with a probable **severely hypothermic patient** that had an open airway, an air pocket (>35 min. burial time or with a cold water immersion) and are in an extended stay (difficult terrain) scenario, be very cautious about immediately starting chest compressions as lethal cardiac arrhythmias will probably be the result if there was a pulse. It will also be impossible to maintain adequate compressions while trying to evacuate the patient in difficult terrain. In the severely hypothermic patient, a weak slow pulse may be present, it is just not detectable with cold fingers. In probable severe hypothermia: Check pulse for 1 minute - continue rescue breathing for 3 minutes - check pulse again for another minute - if no pulse start a trial of chest compressions (CPR). * Rapid, gentle, horizontal transport (if possible) and minimizing further heat loss in the severely hypothermic patient will be the key to a positive outcome. **Something More To Consider:** An open airway and air pocket for gas exchange must be present for an avalanche burial victim to survive long enough to develop severe hypothermia. If the airway is blocked and/or an air pocket is not present and/or an ice mask exists in front of the face then the avalanche victim extricated not breathing and pulseless has died from asphyxiation and/or trauma. **If unclear whether an air pocket was present, assume there was one and continue as above if rapid transport is possible.** Refer to local BLS/ALS protocols for extended stay rescue scenarios.*

- 4.** Control any obvious external bleeding problems with direct pressure, etc and complete a patient assessment.
- 5.** If a pulse is present but breathing is absent or ineffective, continue rescue breathing (8-10 b/min). Continue monitoring for a pulse and improved ventilatory status.
- 6.** Assume spinal injuries if the patient is unconscious or the patient is unreliable on assessment.
- 7. Treat and minimize further hypothermia.** Once extricated, the patient will likely already be cold and will get worse once they are out of the snow. This is a major challenge for the rescuers. (Insulation from the snow, exchanging wet for warm/dry clothes, bivy sack, space blankets, tarps, warm fluids if awake, shelter, and etc will be key).
- 8.** Splint any ortho injuries as indicated.
- 9.** Prepare for evacuation as indicated. Handle the patient as gently as possible maintaining the patient in a horizontal position as possible.