

APRES – Basic Cave Rescue 101



Important assumptions for all cave rescue situations...

- 1) Your patient **WILL HAVE** hypothermia to some extent and preventative measures should be taken!
- 2) The recovery of your patient will take much longer than expected.
- 3) You will have very poor communications whilst underground.
- 4) "Square pegs don't fit in round holes!"
- 5) Cave rescues are labour intensive.
- 6) Cave accident patients always assume the worst outcomes.

Before you embark on a cave rescue you should have...

- 1) Warm, dry clothing.
- 2) Helmet.
- 3) Sturdy boots.
- 4) 3 sources of light (2x electric, candles/waterproof matches), spare batteries.
- 5) First aid kit containing plenty of bandages, splints.
- 6) Survival bag (big orange pack-liner, or bivy bag)
- 7) Be familiar with the cave layout, have a map, carry flagging tape in complex cave systems.
- 8) High energy food.
- 9) Waterproof notepaper and pencil.

Before you enter a cave you should know...

- 1) The weather forecast, your cave may flash-flood if it rains!

Why cavers get into trouble...

- 1) Caver/s get injured (falling, rock fall etc).
- 2) A caver gets stuck (cave collapse, squeezes).
- 3) A caver cannot exit a cave because of illness (hypothermia), or generally knackered!
- 4) Cavers become lost in a complex cave system.
- 5) Total light failure amongst caving party.
- 6) Cavers get trapped by flash flooding.

RESCUE PROCEDURE – WHO DOES WHAT...

- 1) Someone MUST remain on the surface to keep track of who is underground, what equipment is underground, liaise with emergency services. We will call them the "**Surface Controller**".
- 2) Someone must be designated the "**Underground Controller**". Their job is to maintain adequate communications with the surface (appoint "runners"). **PLAN AHEAD**; appoint people to work out how to pass each obstacle; arrange to have "equipment" derigged from obstacles and carried forward; valueate the condition of your rescuers and rest them if necessary.
- 3) Have someone, preferably of a medical background; monitor the condition of the patient ("**Patient Monitor**") throughout the entire operation. This person needs to be cheerful and keep the patient informed of what's happening.
- 4) Designate one person as the "**Stretcher Controller**"; this person should be located to closest to the patient's head. This person communicates stretcher movements

required to the stretcher-bearers. Because of the nature of caves a lot of leap-frogging tends to occur of stretcher-bearers, hence this job will automatically rotate.

- 5) Each major obstacle should have an “**Obstacle Controller**”; this person/s should work out how to pass an obstacle. They should rig haul lines; they should also rig independent safety lines for rescuers if necessary.

RESCUE TEAM PROTOCOLS...

- 1) Cave rescues are a long affair, pace yourself.
- 2) Try to keep in good spirits in the rescue team, if possible swap around so nobody gets too tired, or cold. Stop for the occasional rest.
- 3) Don't shout at each other; avoid getting irritated. Be patient while others are rigging and don't harangue them; if possible give them a hand.
- 4) Remain quiet while others are trying to communicate; the combination of running/dripping water and echoes makes hearing difficult.

STRETCHER RESCUES...

- 1) **RULE #1: SOMEONE MUST ALWAYS PROTECT THE PATIENT'S HEAD!**
- 2) Put the patient in a cervical collar. Dropping stretchers is quite common. Use the “wrap stretcher” if possible, or secure the patient in other stretcher types.
- 3) Put the patient in sleeping bag if possible; or at least a bivy bag over his legs and a foil blanket over him.
- 4) Only move the stretcher forward when everybody is sure of their grip and footings. Use shoulder straps if at all possible. In uneven passages pass the stretcher forward.
- 5) Attempt to “slide” the stretcher over obstacles rather than carry.
- 6) In narrow tight passages, some unlucky caver gets to crawl with the stretcher on his back, whilst front and back are carried.
- 7) In flat-out crawls haul the stretcher through, a tape measure may not go astray!
- 8) Protect the patient's head from falling water; “water-boarding” a patient is considered bad form! Put some eye protection (goggles) on the patient.

SPECIFIC CAVE RESCUE SCENARIOS...

CAVE IS FLOODING: DON'T SEND IN A RESCUE PARTY UNTIL THE WATER SUBSIDES AND FURTHER FLOODING (RAIN) WILL NOT OCCUR! THIS IS VERY TRUE OF “BROKEN RIVER CAVE”.

CAVER JAMMED OR STUCK: BE PREPARED TO DIG, BREAK ROCK, REMOVE THEIR EQUIPMENT & CLOTHES, AND REMEMBER WASHING UP LIQUID MAKES A GOOD LUBRICANT.

INJURED CAVER: WORK OUT HOW THEY GOT INJURED AND AVOID DOING THE SAME TO YOURSELVES. GIVE AS MUCH FIRST AID AS POSSIBLE. IF THE INJURY IS MINOR CONSIDER GETTING THEM OUT; IF A CAVER CAN WALK/CRAWL – MAKE THEM WALK/CRAWL IF IT IS SAFE TO DO SO. IF IT IS A MAJOR INJURY CONSIDER TAKING CAMP, AND THE OUTSIDE WORLD TO THEM (THIS MAY INCLUDE DOCTORS/SURGEONS). ALWAYS ASSUME YOUR PATIENT HAS HYPOTHERMIA AND INSULATE/TREAT THEM ACCORDINGLY. NEVER LEAVE A PATIENT WITH REDUCED CONSCIOUSNESS, OR ONE YOU CONSIDER DYING.

KNACKERED OR ILL CAVERS: MAYBE A LITTLE FOOD AND ENCOURAGEMENT MIGHT BE ENOUGH. GIVE THE CAVER AS MUCH ASSISTANCE AS POSSIBLE. CONSIDER PROVIDING HAUL OR HAND-LINES THROUGH SQUEEZES.

UNDERGROUND ROPE RESCUES: LEAVE THESE RESCUES TO THE EXPERTS; CAVE ROPE WORK IS A COMPLETELY DIFFERENT GAME TO SURFACE TYPE RESCUES THEY TEND TO BE VERY COMPLEX. ARRANGE RESCUE, APPLY FIRST AID, MAKE YOUR PATIENT COMFORTABLE.