Presentation – Cave Rescue Basics

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Jenny Tison & Mike Titzer

- 1. What is in your control in a cave? Your knowledge, preparation, physical/emotional state, movement, the group of people you've agreed to go underground with, and gear. Take care of these things and you will be in a better position to either (a) not need a rescue yourself, or (b) help a team member who needs it.
 - a. Don't forget to bring:
 - i. Personal gear extra light sources/batteries, warm/dry layers, water/snacks, warming devices (sit pad / emergency blanket / etc.)
 - ii. Group gear writing materials, first aid kit, vertical rescue gear as necessary
 - b. And don't forget at the entrance:
 - i. Where are the car keys?
 - ii. Where do you get cell phone service?
 - iii. Do you have a call out person who knows what to do when?
 - c. And watch out for:
 - i. Is there a "keystone caver" in your group? Aka only 1 person who really knows the cave or how to do vertical well. If they go unconscious, you are in trouble.

2. Something happened – now what?

- a. **Slow it down!** Make good decisions and don't add to the problem. Caves are remote. If someone is going to die within 5 minutes, you will not be able to do anything to save them unfortunately. You need to act efficiently, but not hastily.
- **b.** First Aid basics [<u>Disclaimer</u> Please continue to get further training. These are basic principles and may help you or a team mate, but you are ultimately responsible for your own safety.]
 - i. Scene size-up
 - 1. #1 (I'm #1!) Before you approach the scene, make sure you won't get injured too and add to the problem
 - a. E.g. a person in your group got hit in the head by rock fall. You need to decide if there are so many rocks falling you can't get there, or if you can drag them out of the rock fall zone to start evaluating them.
 - 2. **#2 (what happened to you?)** Try to figure out how the person got into this state
 - 3. **#3 (not on me!)** Cover yourself up to ensure the person's bodily fluids won't get on you too. Cave gloves are an option
 - 4. **#4 (any more?)** Are there any other people involved who need help? Often times, the people who are the quietest need help faster than the people who are yelling loudly
 - 5. **#5 (what's the vibe?)** What is your overall impression of this patient?
 - 6. NOW you approach the patient
 - ii. Check the patient for Threats to Life

- 1. **A Airway** is there anything in their mouth? (food, teeth, etc.) if so clear it out! This person needs an unobstructed airway!
- B Breathing can they breathe easily? If not, do a 'head tilt chin lift' like Mike demo'd
- 3. **C Circulation** are they bleeding anywhere? They may not know if they are. With your gloves on, check for blood on the underside of their body (where the blood will pool). Periodically look at your hands so you can identify where the blood may be coming from.
 - a. If they are bleeding, elevate the injury and apply direct, pointspecific pressure for 10+ minutes until the bleeding stops
- 4. **D Decide** Based on what you have observed, should your team:
 - a. Get this person out of the cave yourself?
 - b. Leave them in place and send people out to get help?
 - i. Remember to send them out with a note about what time it is, what is going on with the patient, what help you require, and what your plan is!
 - c. Hybrid Start moving the patient to the cave entrance while an advance party moves more quickly to get help
- 5. **E Environment** Do everything you can to prevent hypothermia for the patient and your team. A common cave saying is "feed 'em, heat 'em, beat 'em"
 - a. Feed 'em get them eating/drinking to start their metabolism (if they can handle food/fluids)
 - b. Heat 'em get a Palmer furnace going (trash bag + candle/lighter), use a thermo wrap, put them on a sit pad to get them off the cold ground, add their layers, etc.
 - c. Beat 'em get them moving
- c. How do you decide whether to get the patient out yourself, send for help, or hybrid? Remember **PPT**!
 - i. **Patient** can they help themselves? Is their injury useable? Do they want to get out? Are they posing a risk to themselves or others?
 - 1. And how are these factors changing over time?
 - ii. Passage horizontal/vertical? Smooth floors vs breakdown? Height of passage walking/crawling? Wet or dry?
 - 1. And how do these change over the length of the cave? Maybe you can move them ¼ mile through easy passage and then halt before a choke point.
 - iii. Team/Gear Does our team have the gear/skills to do this? Is everyone in good shape/functional right now? Do we have the right # of people to pull this off well?
 - 1. How are these changing over time?
- d. Moving the patient we demo'd a few ways to do this