Wilderness First Aid Case Study Handout

Disclaimer: This session is not meant to replace professional medical advice, nor is it intended to provide participants with a first aid certification. It is meant to familiarize participants with first aid techniques that could be relevant in the wilderness context making up the majority of the area of Northern Ontario.

Please also note that some information contained in the slideshow may not be present in this handout

Environment Check - EMCAPI

E - Environmental check. What hazards are present in the environment in which the patient is found? Some use the rhyme, “fire, wire, gas, glass” to check for those things before proceeding. In a wilderness scenario, we might want to think about temperature/exposure, landscape (is there an overhang/widowmaker/steep ledge?), a hostile animal, motor vehicle accident?

M - Mechanism of injury. We want to make a guess as to whether we are dealing with a medical condition or trauma. This will be based on what we see (broken bones, blood, vomit, motor vehicle nearby, fall?) Not too specific, just want a general guess to prepare ourselves

C - Number of Casualties. How many injured people are we dealing with?

A - Allies. Who is already present on scene? Do we have trained bystanders, or other resources we could call upon (EMS, park wardens, conservation officers)?

P- PPE. Use gloves if at all possible. If a mask or gown are available, consider those options

I - Initial Impression and Introduction. For the initial impression, we want to get a general idea about our patient and note anything that stands out to us as unusual.

Things to note:

- Age
- Gender
- Skin condition (excessive perspiration, cyanosis, discolorations, etc.)
- Breathing (Is it present at all? Excessive, shallow, rapid? Are they tripoding)
- Alertness (Are their eyes tracking you? Are they sitting/standing?)
- Anything else of note?

Finally we would make our introduction if it is safe to do so and follow this script.
“Hi, my name is _____ , can I help you?” If the responder is First Aid certified, the statement should be “Hi, my name is _____ and I know First Aid, can I help you?”

Primary Survey

ABCD Check

A - Airway. Confirm that the patient has a functional airway. Not blocked, crushed, or otherwise non-functional

B - Breathing. Confirm that the patient is breathing sufficiently on their own.

C - Circulation. Confirm that the patient has a pulse. Take at their wrist or neck (radial or carotid pulse)

D - Deadly bleed. Confirm the patient is not severely bleeding. Look for wetness in clothes or pooling blood.

AVPU Scale

-Note that this is not a checklist, but a scale where a person falls in regards to their consciousness. Begin with checking for A, and carry on until the person responds or is determined to be unconscious.

A - Alert. The patient responds and seems oriented when questioned. For example, hopefully everyone reading this handout is conscious, and could answer questions like, “What day is it? What is going on around you?”

V - Verbal. The patient responds to speech, but is not responding coherently to questions.When you speak to the person, or make a loud sound, the patient moves or otherwise shows that they have registered that something is happening.

P - Pain. The patient responds to a trap squeeze or sternal rub (demonstrate), but otherwise does not respond. The person may respond with a sound or movement to these but is still not responding to voices or sounds.

U - Unconscious. The patient does not respond to any attempts to interact with them. No response is shown to any attempts to verbally communicate or physically engage them.

Secondary Survey

SAMPLE Check - Refresher from ABC's of Health
S - Signs and Symptoms
A - Allergies
M - Medications
P - Past Medical History
L - Last ins and outs
E - Events prior (Event history)

Vital Signs - Slight change from ABC's of Health, Field Assessment (limited equipment)

LOC - (Glasgow Scale)
Breathing - Rate, Rhythm and Quality
Pulse - Rate, Rhythm, and Quality; also gives insight into BP
Skin - Colour, Condition, Temperature
Pupils - PERRLA

OPQRST - Refresher from ABC's of Health

O - Onset
P - Provoke
Q - Quality
R - Region / Radiate
S - Severity (Scale)
T – Timing

Treatments

Choking: Choking can occur to anyone, anywhere at any time. Watch for common signs of choking like raspy breathing, coughing, attempting to swallow, or when a victim makes the universal sign of choking. Introduce yourself to the victim (if conscious) and when the person can no longer pass air/you hear no coughing you can move into first aid. Never allow a potential choking victim to go into a private place (such as a restroom), stay with the person until they have dislodged the item and can resume normal breathing. Recommend that the choking victim has a check-up with their physician, regardless of whether or not they were able to dislodge the item themselves.

Environmental Illness: Be on the lookout for temperature illnesses on particularly hot or cold days. Once you identify the illness, do your best to SLOWLY return the casualty to a normal temperature. Watch out for common allergens such as bee stings, peanuts, or fish. Should a person have an anaphylactic reaction, help administer their Epipen if available and seek emergency help immediately. Avoid hazardous plants and animals when hiking, and wash with

cold water if exposed. It is also important to be aware of biting animals such as the species of ticks native to Northern Ontario and the prevention strategies applicable.

Shock: Shock is a potentially life-threatening condition resulting from insufficient blood flow to the body. It occurs in four stages; Initial, Compensatory, Progressive, Refractory. The process occurs in this order, beginning with the Initial Stage and ending with Refractory. The identification of the five different types of shock is also important for determining how treatment will proceed. These types include Hypovolemic, Cardiogenic, Septic, Anaphylactic, and Neurogenic.

Bone, Joint, and Soft Tissue Disorders: Recognition of a bone, joint, or soft tissue disorder is vital to an effective treatment. For these sorts of injuries, it is best to follow the acronym RICE (Rest, Immobilize, Cold, Elevation). Following this, it is important to get medical help, treat for shock (if applicable), and continually check for a pulse distal to the injury if possible. If the patient is to be moved by someone other than EMS, it is also good practice to support the injured area with a splint or sling. Sometimes, responders will have to be creative to find materials to support the injury if proper splints or triangle bandages are unavailable.