

British Columbia OFA3 First Aid Study Notes

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This information was compiled as my own personal notes when I took the OFA3 first aid course in August of 2011 and again in August of 2014. Please feel free to photocopy, share with other planters, and disseminate this information in any manner that you want – safety should be a priority at every planting company. However, be aware that some of the content and approaches in this course changes from time to time, so you should ALWAYS review and compare to your current course notes before relying upon this information as the best practice. Neither Jonathan Clark nor Replant.ca shall assume any liability for errors or omissions in these notes, and your official OFA3 training should always supersede any information presented here. As the OFA3 curriculum is updated frequently, I recommend that if you want to be 100% certain that everything in this set of study notes is correct, you print a copy and ask your instructor to review it for you. Also, if you post this on other websites, I would appreciate if you would please include a link back to the above site. Thanks!

A copy of these notes as an audio transcript (mp3) which can be streamed or downloaded is available here: https://soundcloud.com/djbolivia/ofa3-first-aid-course-study

If you're looking for a PDF copy of the full OFA3 student study manual (plus a few other resources), go to my public Dropbox: http://www.djbolivia.ca/dropbox.html

(Go into the "Canadian Reforestation" folder and then into the "OFA3 First Aid" folder).

Basic Formula for Injury Management:

SA (LOC) :: A - B - C - P - S - RBS :: TD/CI :: CC - Hx - H2T :: DT

SA = Scene Assessment

LOC = Level of Consciousness, a brief unofficial assessment as you approach the patient

A = Airway Management (including critical interventions)

B = Breathing Management (including critical interventions, BAHE and others)

C = Circulation Management (including critical interventions)

P = Pulse check (radial, 2nd radial if necessary, carotid if necessary)

S = Skin Check (often helps put patient into RTC)

RBS = Rapid Body Survey

TD = Transport Decision – is the patient going to be RTC?

CI = Any other critical interventions not included in ABC's

CC = Chief Complaint (what happened – recorded on patient assessment chart)

Hx = Patient's History (recorded on patient assessment chart)

H2T = Detailed examination of patient – might put patient into RTC

DT = Definitive Treatments – only if patient is not RTC, or if they can be done easily in transit

Rapid Transport Category (RTC)

The following is a list of conditions which automatically put a patient into the RTC Category. There are basically three "groups" of circumstances which put a person into RTC: "Mechanism of Injury" (what happened), "Anatomy of Injury" (where the injury is), and "Findings in the Primary Survey" (things that you discover as a first aid attendant while examining your patient).

Mechanism of Injury:

- Free fall from greater than 20 feet.
- High speed accidents or major vehicular damage.
- Broken windshield or damaged steering wheel in MVA.
- Occupant thrown from vehicle.
- Any other people involved in accident are fatalities.
- Rollover accident.
- Pedestrian/cyclist struck at greater than 30 km/h.
- Severe crush injuries of any type.
- Smoke or toxic gas inhalation, including carbon monoxide and H2S.
- Decompression illness (diving).
- Near drowning.
- Electrical injuries.

Anatomy of Injury:

- Severe brain injury.
- GCS of 13 or less at any time. This applies regardless of whether it was the initial GCS score, or because it decreased to 13 part-way through scenario (14 is automatic medical aid but maybe not RTC).
- Pupillary inequality > 1mm & sluggish response.
- Depressed skull fracture.
- Penetrating injury to anything but limbs.
- Two or more proximal long bone fractures (elbows & knee fractures/dislocations count as a long bone).
- Flail chest.
- Pregnant women with any fairly moderate trauma (ie. broken bones, fall down stairs).
- Inhalation injury (smoke).
- Extensive burns to face, hands, feet, genitalia, or encircling a limb.
- 2nd degree burns > 10% of body.
- 3rd degree burns > 2% of body.
- Chemical or electrical burns.
- Amputation other than a toe or finger.
- Spinal cord injury, paraplegia, quadriplegia.
- Penetrating eye injuries.

Findings in Primary Survey:

- Decreased LOC.
- Partial OR complete airway obstruction.
- Anything requiring assisted ventilation.
- Respiratory rate < 10 per minute, or severe dyspnea.
- Cardiac arrest.
- Suspected heart attack.
- Obvious circulatory shock.
- Bleeding requiring pressure point (indirect pressure) or a tourniquet.
- Acute poisoning.
- Status epilepticus.

- Suspected stroke.
- Anaphylactic reaction.
- Hypothermia (even moderate).
- Heat stroke.

Additional Automatic RTC's that are NOT mentioned on page 27, but are mentioned later in book:

- Deteriorating COPD, Hypoventilation, prolonged Asthma, Pulmonary Edema.
- Internal bleeding.
- Tourniquet (which is rarely needed).
- Angina pain that is not relieved by 2 shots of Nitroglycerin.
- Generalized or focal seizures.
- Acute abdomen.
- Pregnancy with abdominal pain, labour pains, or vaginal bleeds/leakage.
- Potential tetanus, gas gangrene, or necrotizing fasciitis.
- Hip dislocation/fracture, or knee dislocation (both categorized as limb-threatening RTC).

Random Charts/Procedures to Memorize:

Memorize Priority Action Approach flow chart on page 26!!!

Memorize CPR Stuff, page 114-115.

PPQRRST: Position, Provoke, Quality, Radiate, Relief, Severity, Timing.

Adjusted Primary Survey for Walk-Ins: SCAB (Stance, Colour, Anxiety, Breathing).

³/₄ Prone is possible for non-trauma & unconscious. It is also possible for heat stroke, but not mandatory for either. Position of comfort is for non-trauma & conscious.

Supine packaging for all trauma, and also for any non-trauma possible C-spine.

Always attempt Assisted Ventilations for "Blue or Bad Breathing." This means that you attempt assisted vents in four different types of circumstances: Absent or slow rate of respiration, cyanosis, ineffective respiration, or severe respiratory distress. Another way of putting it is that you do assisted vents for NO breathing, SLOW breathing, Gasping, or Cyanotic.

Types of Critical Interventions for AIRWAY can include: OPA, suction, vents, lateral positioning, chest compressions, tongue-jaw lift, finger scoop, abdominal thrusts, head-tilt chin-lift, cough, oxygen, three quarters prone, and epinephrine. Do whichever one or ones are necessary.

When there are airway problems (partial or no airway), it is important to go through BAHE: Blow, Airway, Hose, Expose.

Indications for Use of Oxygen: respiratory or cardiac arrest, RTC trauma, SOB, shock, cardiovascular or respiratory illness, inadequate respiration, decreased LOC, pregnancy, MedEvac, decompression illness.

Circulatory Emergencies: Shock, bleeding, or cardiac emergency.

Three P's of Bleeding Control:

P = Position of Patient

P = Position of Part/Injury

P = Pressure (direct and possibly indirect too).

Another way to remember is to think of the color of blood, ie. RED: Rest, Elevate, Direct pressure.

Head-Tilt Chin-Lift = Non-Trauma.

Jaw Thrust = Trauma or unwitnessed.

ABC's = 5 minutes for RTC, 10 minutes for non-RTC

Vitals = 10 minutes for RTC, 30 minutes for non-RTC

Anatomical Terms:

- Supine = on back; Prone = on stomach.
- Anterior = in front; Posterior = in back.
- Medial = closer to midline; Lateral = outside, away from midline.
- Superior = above; Inferior = below.
- Proximal = toward the trunk; Distal = away from the trunk.

Glasgow Coma Scale:

- E, Eye: 4=alert, 3=sluggish, 2=pain response, 1=nothing
- V, Verbal: 5=alert/oriented, 4=coherent, 3=inappropriate, 2=groans, 1=nothing
- M, Motor: 6=obeys, 5=localizes, 4=withdraws, 3=decorticate, 2=decerebrate, 1=nothing

Signs to Look For during Head-To-Toe:

- Head: Battle's sign, CSF, racoon eyes, broken teeth.
- Neck: JVD, tracheal deviation.
- Chest: bilateral comparison, sternal stability, open pneumothorax, flail, subcutaneous emphysema, accessory muscle use.
- Abdomen: Four quadrants, distension, guarding/rigidity.
- Pelvis: Stability in three planes.
- Extremities: Distal CMS.

Some extra questions for the Head-To-Toe:

- Can you breathe easily?
- Is there any pain, numbness, tingling, or weakness in any other parts of your body?
- Do you feel dizzy, have blurred vision, or feel nauseous?
- Do you feel the need to void?

Altered Level of Consciousness:

- A Alcohol
- E Epilepsy
- I Insulin (Diabetes)
- O Overdose
- U Uremia (Kidney Failure)
- T Trauma
- R Respiration
- I Infection
- P Poisoning
- S Stroke

Refer to Medical Aid:

- Wounds longer than 3cm.
- Hand wounds over joints, tendons, or through full thickness of skin.
- Wounds that require sutures.
- Wounds which are dirty with ground-in foreign contaminations.
- Human or animal bites.

- Burns (less than 10% for 2nd degree, less than 2% for 3rd degree).

Random Things That We Often Forget:

- Always attempt to put an airway into an unconscious patient, immediately. A moaning patient is generally not considered to be unconscious and won't take the airway.
- For spurty blood, vocalize that we're putting on goggles.
- Cyanotic automatically means assisted vents (remember "blue or bad breathing").
- BAHE means Blow, Airway, Hose, Expose, and is used any time there is "Blue or Bad Breathing."
- The only critical interventions for the Circulation part of the ABC's that are stabilized before packaging are Critical Bleeds, and stabilizing a penetrating eye injury.
- The Bag-Valve Mask is only brought out at the very end of two sequences; (1) during transport after secondary when there is nothing left to do; or (2) during CPR when second rescuer is assisting effectively and an airway is already in.
- It is often best to do the trap squeeze and other hand on opposite sides of the head, but this is NOT mandatory.
- Always mark the time on your glove after bandaging when indirect pressure is being used, and release IP after five minutes
- It is a good habit to do ABC's right after rolling onto the board, and again before strapping the head.
- Check major bandages and similar critical interventions when checking ABC's.
- Any time there is a decreased LOC patient who is non-trauma, check for a Medic Alert bracelet to give you clues to the problem.
- Splints are absolutely useless unless they have camber.
- Socks only come off during H2T, not during RBS.
- Only "expose" during any part of primary survey if there is likelihood of arterial bleeds or chest trauma. Other than those two, "exposing" usually happens only during H2T.
- When you have just put an OPA in (for Airway), you ONLY attempt assisted ventilations for "bad or blue breathing" conditions.
- During CPR, do NOT check carotid except after the first time that two breaths go in successfully.
- All decreased LOC patients who are non-trauma should be three-quarters prone. Heat stroke can also go Lateral to assist in cooling.
- Don't forget to put on gloves at the start.
- Don't forget to watch your helper closely. If the helper lets go of C-Spine or does something really stupid during the exam and you don't correct them, you can lose points.
- You have to go through the motions of actually training your helper to do stuff, not just vocalize.
- Don't ever let go of C-Spine control to do something else! Get a helper.
- Non-traumatic chest pain is automatic PPQRRST during modified RBS (because of possible heart attack).
- Use the Double Sternal Clamp front and back (not trap squeeze & opposite hand) when lowering from sitting to laying, or other awkward C-Spine situations.
- Stroke is ¾ prone. Side up determined by packaging patient ON "Right for Flight, or Left for Land."
- If Angina needs a second shot of Nitro, it is automatic RTC. The most shots you are allowed to administer is three in total. Wait five minutes between shots.
- For Angina and RTW, you must still do a set of vitals.
- Oxygen MUST be given to potential concussions or any other brain injuries, or GCS of 14 or less.
- Peripheral nerve injury alone is not RTC. Spinal injury alone is not RTC. But both (which is indicative of spinal CORD injury) is RTC.
- Ice is a definitive treatment. Don't put it on during primary/secondary or Cl's.
- CPR: Always start using the AED immediately (for single or double rescuer) if you have your AED present.
- Don't forget to put the gauze under the dressing for bleeding control.
- Don't forget (during exam) to teach the assistant how to do vents. A 10 second explanation is not enough. The assistant is assumed to be dumb, so for ANY training of assistants, be very thorough during the exam.
- All RTC's automatically get oxygen.

- For unknown problems that are considered to be definitely non-medical (up to that point), skip vitals and go to history and modified H2T. Check severity. RTW if not a big problem, but re-do the full secondary and send on to medical aid if there are any concerns. Palpitate to rule out point tenderness (fractures).
- If LOC drops significantly during secondary while en route to hospital and there is no airway in, pull over and get driver to assist. Shoulder straps come off first, then driver helps C-spine, loosen collar (head strap still on), insert airway, repack, go.
- The multi-person (8-person) lift is ONLY used in some types of non-RTC situations. Always practice three times on a bystander before actually attempting this lift.
- Venous bleeds can be controlled during primary survey but that alone is NOT enough to put patient into RTC.
 They are different than arterial bleeds. Ask for clarification on how much blood is coming out.
- For headache, you will have to do very, very extensive questioning.
- For soap in eye, wash eye with water, thorough examination, look in mirror, test on eye chart. Wash hands before touching eye.
- Tensors are used in amputations. Roller Gauze is not used much except for splinting (for support). Crepe Bandages are used most of the time.
- When checking chest, say, "What do I see or feel?" Don't just ask what you see. Good for flail chest, etc.
- On the RBS, ask if there is any feeling in the limbs.
- Oxygen is normally 10 litres/min, but if you switch to BVM, switch to 15 litres/min.
- Absent radial pulses = shock.
- Use indirect pressure when the wound has a protruding bone or embedded foreign body that interferes with direct pressure.
- Viagra, Cialis, or Levitra in the past 24 hours means that you cannot take Nitroglycerin (for Angina).
- All patients with a soft-tissue injury to the scalp must be assessed for possible cervical spine injury and immobilized accordingly.
- All patients with a head injury severe enough to cause loss of consciousness, no matter how brief, or any other potential signs of concussion must be referred for medical assessment.
- Trauma to the anterior neck is one of the few cases where a cervical collar should not be used to stabilize neck.
- Pregnant women should be packaged lateral left or at least leaning left.
- Do not apply cold if the distal circulation is impaired.
- Someone with no circulation distal to a limb injury is considered to have a limb-threatening injury, so RTC.
- For Hypothermia, you should spend a full minute assessing pulse, if necessary. Hypothermic patients in cardiac arrest are never dead until they are warm and dead.
- Eight person lift is for non-trauma, non-RTC, possible spinal injury.
- Normal Gauze = used when there is a bleed. Non-Stick Gauze = used on everything else.

Some Abbreviations:

ACLS – Advanced Cardiac Life Support

AED - Automated External Defibrillator

ASTD – Activity-related Soft Tissue Disorders

BAHE – Blow, Airway, Hose, Expose

BCLS – Basic Cardiac Life Support

BSF - Basal Skull Fracture

CI – Critical Intervention

CMS - Circulation, Motor, Sensory

COPD – Chronic Obstructive Pulmonary Disease

CSF – Cerebrospinal Fluid

CVA – Cerebrovascular Accident (Stroke)

DOTS - Deformity/Discolouration, Open Wounds, Tenderness, Swelling

DT – Definitive Treatment

ER – Emergency Room

ER – Equal and Reactive/Responsive (pupils)

GCS - Glasgow Coma Score/Scale

HAVS - Hand Arm Vibrating Syndrome

H2T – Head To Toe

Hx - History

ICP – Intercranial Pressure

JVD - Jugular Vein Distension

LOC – Level Of Consciousness

MSDS – Material Safety Data Sheet

MSI – Muscular Skeletal Injury

MVI - Motor Vehicle Incident (was MVA for accident)

NKA - No Known Allergies

NKM - No Known Medications

NWD - Normal, Warm, Dry

OPA – Oropharyngeal Airway or Oral Pharyngeal Airway (oral airway)

PCC - Pale, Cool, Clammy

PCC - Poison Control Centre

PCD - Pale Cool Dry

Px - Patient

RBS – Rapid Body Survey

ROM - Range Of Motion

RTC – Rapid Transport Category

Rx - Prescription

SA – Sino Atrial

SCA - Sudden Cardiac Arrest

SOB - Shortness Of Breath

WHMIS - Workplace Hazardous Materials Information System

Conclusions

If you have any suggestions or additions to the above information, please send an email to jonathan.scooter.clark@gmail.com or post feedback in the appropriate thread of the training forum on the Replant Message Boards at www.replant.ca/board

Also, please feel free to print this page and pass the information along to other potential planters, and let them know the link to www.replant.ca

- Jonathan Clark (Scooter).