COMBAT CASUALTY ASSESSMENT

DCME 2018 V1.1

Conditions: While in the tactical area of operations, you encounter a combat casualty. You have a medical aid-bag, weapon, ballistic helmet, individual body armor, and Improved First Aid Kit (IFAK).			
Standard: Complete a Combat Casualty Assessment in 30 minutes. (Note: Time starts at CUF step 3, once the Combat Medic "directs" security to provide coverage, and ends at step 24).			
Care Under Fire Phase (CUF)	**1st**	**2nd**	**3rd**
1. Return fire to gain fire superiority.			
2. Direct the casualty to return fire, move to cover, and apply self aid, if possible.			
3. Direct security team to provide security for casualty. Move to casualty once the security team is in place and has signaled for the medic to move forward.			
M-MASSIVE HEMORRHAGE			
4. **Major Life-threatening Extremity Bleeding.** *Apply HASTY tourniquet(s) high on limb over uniform, to control obvious extremity bleeding and move casualty to cover.			
Tactical Field Care Phase (Primary Assessment)			
1. If tactical situation permits, take body substance isolation precautions.			
2. If not completed previously, assess responsiveness and chief complaint. ____Unresponsive ____Responsive (If unresponsive, assess for presence of carotid pulse and respirations. If absent, respond IAW tactical environment).			
3. Observe for any amputations or obvious extremity bleeding (**not previously addressed in CUF**) and rapidly apply DELIBERATE tourniquet(s). Apply Sam Junctional Tourniquet (SJT) if indicated. (ie: inguinal wound where CAT and hemostatic agents are not effective). **Perform blood sweep** of neck, axillary, inguinal, and extremity areas. If needed, apply the following interventions: a._____ Rapidly apply hemostatic agent (hold pressure for 3 minutes) to neck, axillary and/or inguinal wounds discovered. b._____Assess effectiveness of previously placed tourniquets, if ineffective apply a deliberate tourniquet.			
AIRWAY A-AIRWAY			
_____Open (head tilt) and assess airway (look, listen and feel). Insert appropriate adjunct, as indicated and secure. ____ NPA ____ Surgical Cric _____Position casualty to maintain an open airway.			
BREATHING R-RESPIRATION			
Remove casualty's equipment (IBA). Expose and **assess torso** (**front and back**). Manage penetrating torso wounds, if present. ____ Occlusive Dressing _____ Check for exit wound			
Assess breathing for equal rise and fall of chest, spontaneous respiratory effort. _____ Adequate spontaneous respirations _____ Manual ventilations necessary _____If no injuries drape body armor over the casualty's torso, if injured leave off.			
Monitor casualty's respiratory effort. **Note:** Progressive respiratory distress + torso trauma = Needle Chest Decompression. (Identify 2nd ICS MCL or 5th ICS at the AAL). Insert 10 or 14 ga 3.25" needle catheter over the rib to the hub. Leave the needle catheter in place for 10 seconds to evacuate air from the pleural space of the chest. Remove needle. Secure catheter to chest wall. Reassess respiratory effort.			
If other injuries permit, position casualty to facilitate respiratory effort.			
CIRCULATION C-CIRCULATION			
6-A. Treat significant non-pulsatile bleeding with packing (as necessary) and pressure bandage.			
For wounds treated with a HASTY tourniquet during Care Under Fire: Expose and assess injury: If tourniquet **not indicated**, convert Hasty tourniquet to other bleeding control means (hemostatic, pressure bandage). If **tourniquet indicated**, complete the following sequence to convert the HASTY tourniquet to a DELIBERATE tourniquet:			
____Apply and tighten ***DELIBERATE*** tourniquet 2-3 inches above the wound. ____Loosen HASTY tourniquet after DELIBERATE tourniquet has been applied. ____Check distal pulse.			
____If distal pulse present, attempt to further tighten ***DELIBERATE*** tourniquet. ____If ineffective, place and tighten an additional tourniquet directly above and next to the DELIBERATE tourniquet. Tighten until pulse is absent.			
____ Re-assess packing of junctional wounds, if present (Neck, Axillary, or Inguinal). Repack if necessary.			
6-B. Need for vascular access. H-HYPOVOLEMIA			
Check radial pulses, if absent, check for carotid pulse. ____Bilateral Radial Pulse Check. ____Carotid Pulse Check.			
____Significant injuries, present radial pulses, normal mental status = Saline Lock. ____Significant injuries, absent radial pulses and/or altered mental status = Saline lock followed by TXA infusion (1GM TXA in 100ml of IV solution (NS or LR over 10 minutes), then flush with 5cc of NS and administration of blood products or Hextend. **Start**_____ **Stop**_____ ____IO placed for casualty that require fluid resuscitation after 2nd Saline Lock attempt was unsuccessful or not possible.			
____Initiate 500ml Blood Product (Type 0 Low Titer Whole Blood) or Hextend wide open. Continue CCA. **Start:** _____ ____Reassess mental status & radial pulse after each 500ml bolus. Continue resuscitation until a palpable radial pulse, improved mental status, or systolic BP of 80-90 mmHg is present. Administer second dose of TXA, if indicated.			
7. Wrap any junctional wounds, **if present** (Neck, Axillary, or Inguinal wounds).			
8. **Notify the tactical leader for casualty evacuation.** ____Lines 3, 4 , and 5 minimum			
H-HYPOTHERMIA			
9. Prepare casualty to prevent/treat hypothermia and place on an evacuation device.			
10. Reassess prior interventions (HABC).			
11. **____Check for drug allergies before administration. _____Administer appropriate pain management.** ____Oral transmucosal fentanyl citrate (OTFC) 800ug. (Place between the cheek and gum. Do not bite or chew the lozenge). _____Ketamine 20mg Slow **IV/IO** push over 1 min. May repeat dose every 20 min for severe pain. _____Ketamine 50mg **IM or IN**. May repeat dose every 30 min for severe pain. _____Mobic, 15mg **PO** once a day _____Tylenol, 650mg bilayer caplet, 2 **PO** every 8 hours			

Student Name: _____ **Team**_____ **Date** ____ **Scenario used for CCA testing**_____

Instructor: 1st _____ **2nd**_____ **3rd**_____

COMBAT CASUALTY ASSESSMENT

DCME 2018 V1.1

Detailed Physical Exam (Secondary Assessment)	1st	2nd	3rd
12. **Head (Score 1 point each)** **H-HEAD INJURY**	**Max of 3 pts**		
1. ____ Inspect and palpate for DCAP BLS and TIC. 2. _____ Inspect eyes for PERRL. 3. ____ Inspect mouth, nose and ears. _____ Manage any injuries appropriately. (0 points)			
13. **Neck (Score 1 point each)**	**Max of 4**		
1. _____ Inspect for DCAP BLS. 2. _____Palpate cervical spine for TIC. 3. _____Check position of trachea. 4. _____Check jugular veins. _____Manage any injuries appropriately. (0 points)			
14. **Chest (Score 1 point each)**	**Max of 2**		
1. _____Inspect and palpate for DCAP BLS and TIC in chest (shoulder girdle, sternum and rib cage) and axilla. 2. _____Auscultate bilaterally for presence or absence of lung sounds. _____Manage any injuries appropriately.(0 points)			
15. **Abdomen/Pelvis (Score 1 point each)**	**Max of 3**		
1. _____Inspect and palpate abdomen for DCAP BLS and TRD. 2. _____Assess pelvis for TIC. 3 . _____Inspect genitalia and perineum. _____Manage any injuries appropriately. (0 points)			
16. **Lower Extremities (Score 1 point each)**	**Max of 3**		
1. _____Inspect for DCAP BLS. 2. _____Palpate for TIC. 3. _____Assess motor, sensory and circulatory function. _____Consider splinting extremity if required. (0 points). _____Consider alternate bleeding control measures and tourniquet conversion if evacuation time is delayed > 2 hours. _____Manage any injuries appropriately.(0 points)			
17. **Upper Extremities (Score 1 point each)**	**Max of 3**		
1._____Inspect for DCAP BLS. 2. _____Palpate for TIC. 3._____Assess motor, sensory and circulatory function. _____Consider splinting extremity if required. (0 points) _____Consider alternate bleeding control measures and tourniquet conversion if evacuation time is delayed > 2 hours _____Manage any injuries appropriately. (0 points) _____ Manage TXA prn. (0 points) _____If indicated, convert DL or SL as required. (0 points)			
18. **Posterior Thorax, Lumbar and Buttocks (Score 1 point each)**	**Max of 2**		
1. _____Inspect for DCAP BLS. 2. _____Palpate for TIC along spine. _____Manage any injuries appropriately. (0 points)			
Total Points scored for Detailed Physical Exam:			
Prepare for TACEVAC			
19. Place on evacuation device, if not completed already.			
20. Reassess casualty and secure all intervention(s).			
21. Antibiotics: recommended for all open combat wounds. PO (IF able) = _____Moxifloxacin, 400mg PO once a day. IV/IO = _____Cefotetan, 2g IV (slow push over 3-5 minutes) or IM every 12 hours **OR** _____Ertapenem, 1g IV/IM QD.			
22. Baseline vital signs, elicit AMPLE history. **Complete casualty care documentation. ____ Standard ___Non Standard**			
23. Secure casualty to evacuation device and prepare for transport.			
24. Verbalize continued reassuring and reassessing casualty until MEDEVAC arrives.			
End of Assessment			
CRITICAL CRITERIA	**1st**	**2nd**	**3rd**
Failed to identify and properly treat life threatening injuries within 7 minutes. **(Step 3 of CUF to bilateral radial pulse check of step 6B) bi-lateral radial pulse check (Step 6-B) complete time:_____/_____/_____**			
Failed to perform bilateral radial pulse check in 6B.			
Failed to complete HABC in order.			
Failed to notify the tactical leader for casualty evacuation.			
Failed to obtain 14 out of 20 on the detailed physical exam.			
Failed to prepare casualty to prevent hypothermia.			
Failed to complete assessment in 30 minutes. (Time begins at Step 3 of CUF and ends at step 23) Overall stop:_____			
Failed to manage the casualty as a competent medic (Instructor must explain in the comments).			
G (GO) or No Go (NG):			
Instructor Comments:			

Student Name: _____ Team_____ Date ____ Scenario used for CCA testing_____

Instructor: 1st _____ 2nd_____ 3rd_____

COMBAT APPLICATION TOURNIQUET

Conditions: While in the Tactical Field Care phase, you encounter a casualty with life-threatening bleeding from an extremity.

Standards: Control life threatening bleeding by applying a Combat Application Tourniquet in 60 seconds or less (steps 2-

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, a writing instrument, stop watch, a fully stocked improved first aid kit (IFAK), and rescue randy manikin or leg assembly.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Route the band, buckle end first, under the limb and above the wound.			
4. Pass the red tip through the inside slit in the buckle, and position the CAT 2-3 inches above the wound, and directly on the skin.			
5. Pull the band as tight as possible and secure the Velcro back on itself all the way around the limb, but not over the rod clips. **NOTE:** Band should be tight enough that three finger tips cannot be slid between the band and the limb. If the tips of three fingers slide under the band, retighten and re-secure.			
6. Twist the windlass until the bleeding stops.			
7. Secure the windlass rod inside the windlass clip to lock it into place.			
8. Check for distal pulse. If distal pulse is present: 1) Attempt additional tightening 2) If distal pulse is still present, apply a second CAT above and side by side with the first one.			
Evaluator States: "bleeding is controlled" if applied correctly. **Evaluator States: "bleeding IS NOT controlled." If applied on joint or < 2 inches from wound, time continues (SM may correct).**	**X**	**X**	**X**
9. If possible, continue to route the self-adhering band between the windlass clips and over the windlass rod. Secure the rod and band with the windlass strap.			
10. Place a "T" and the time of application on the casualty.			
Evaluator: "Prepare the casualty for transport."	**X**	**X**	**X**
11. Secure the CAT in place with tape.			
****Evaluator States: "Evacuation time is delayed >2 hours."**	**X**	**X**	**X**
See Emergency Bandage Skill Sheet. Performance begins at Step 3.			
CRITICAL CRITERIA			
Failed to complete steps 2-8 in 60 seconds or less. **Time:**_____/_____/_____			
Placed the tourniquet less than 2 inches from the wound.			
Placed the tourniquet on a joint.			
Failed to assess for a distal pulse.			
Failed to mark casualty with "T"and time of application.			
Failed to control bleeding.			
Failed to secure the Velcro back on itself all the way around the limb.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

** For use when evaluating the CAT with the ETB

Instructor comments:

Student Name:_____ **Team:**_____**Date:**_____

Instructor: 1st_____ **2nd**_____ **3rd**_____

EMERGENCY BANDAGE

Conditions: While in a Tactical Field Care phase, you have a combat casualty with a gunshot wound to an extremity, radial pulses present, and no AMS. A CAT has been placed and bleeding is controlled. You are notified by the tactical commander that the evacuation time has been delayed greater than 2 hours.

Standard: Convert a CAT to an effective pressure dressing that controls bleeding with an Emergency Bandage in 4 minutes or less (Steps 3-11).

Required equipment and supplies: Ballistic helmet, individual body armor, emergency bandage, gauze (kerlix or Combat), 3 inch tape, and exam gloves. Rescue randy manikin or leg assembly with a CAT correctly applied.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Pack the wound with gauze. Gauze should extend 1-2 inches above the skin.			
4. Verbalize holding pressure for a minimum of 3 minutes.			
5. Place white portion of the dressing down covering all of the wound.			
6. Wrap the elastic portion of the bandage around the extremity.			
7. Insert elastic wrap into the pressure bar.			
8. Pull bandage in opposite direction apply pressure with the pressure bar over the wound.			
9. Continue to wrap the wound **tightly** ensuring all edges of the wound pad are covered.			
10. Secure the closure bar to the bandage.			
11. Loosen the tourniquet and do not remove from the limb (Loosen both windless and velcro).			
Evaluator: "bleeding is controlled." **Evaluator: "bleeding reoccurs", time continues. Retighten the tourniquet until bleeding stops, the distal pulse is absent (SM must reassess packing and EB), and SECURE with**	**X**	**X**	**X**
12. Secure the bandage with tape.			
CRITICAL CRITERIA			
Failed to complete steps 3-11 in 4 minutes or less, effectively control bleeding with an EB. **Time:_____/_____/_____**			
Failed to pack the wound correctly.			
Failed to correctly state the 3 minute time requirement for holding pressure.			
Failed to loosen the tourniquet.			
Failed to control bleeding.			
Bandage failed to have a pressure effect (Bar not placed over wound).			
Failed 4 or more steps.			
Failed to perform a competent medic.			
G (GO) or No Go (NG):			

* Skill begins with step 3 if evaluating EB application along with CAT application and the student received a "GO" for the CAT.

Instructor comments:

Student Name:_____ **Team:** _____ **Date:** _____

Instructor: 1st_____**2nd**_____**3rd**_____

SAM JUNCTIONAL TOURNIQUET

Conditions: While in the tactical field care phase, you encounter a casualty with external bleeding from an inguinal wound that is not amenable to tourniquets, pressure bandage(s), and/or hemostatics.

Standards: Properly apply a SAM JUNCTIONAL TOURNIQUET (SJT) to effectively control the bleeding in 3 minutes or less (steps 2-8).

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, stop watch, eye pro, an assistant, cravat, 3 inch tape, and a SJT kit.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Slide the belt underneath the casualty's lower back and slide down until it is centered over the greater trochanter and connect the buckle.			
4. Attempt to locate femoral pulse (no longer than 10 seconds). Position the Target Compression Device (TCD) over the femoral pulse (air valve above the belt).			
5. Have assistant hold the TCD in place until fully inflated.			
6. Pull the BROWN HANDLES away from each other until you hear an audible click. Fasten excess belt in place by pressing it down on the Velcro (you may hear a second click once the belt is secure).			
7. Attach hand pump and fully inflate the TCD.			
8. Assess for bleeding control and check distal pulse (if applicable). If bleeding and/or pulse is present adjust TCD placement.			
Evaluator States: "bleeding has been controlled" if applied correctly. **Evaluator States: "bleeding NOT controlled" or "pulse IS present", if applied incorrectly (SM may adjust TCD placement to correct).**	**X**	**X**	**X**
9. Place a "T" and the time of application on the casualty.			
10. Secure the device by applying cravat from the brown handle to the brown handle with a non-slip knot and secure tails with tape.			
CRITICAL CRITERIA			
Failed to complete steps 2-8, effectively control bleeding in 3 minutes or less. **Time:_____/_____/_____**			
Failed to check for exit wound.			
Failed to assess for bleeding control and/or distal pulse.			
Failed to place a "T" and the time of application on the casualty.			
Failed to secure the device.			
Failed 3 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ Team: _____ Date:_____

Instructor:

1st_____2nd_____3rd_____

PRESSURE DRESSING-INGUINAL

Conditions: While in the tactical field care phase, you encounter a casualty who is bleeding externally from an inguinal wound that requires packing and a pressure dressing.

Standards: Control bleeding by packing and applying an effective pressure dressing to an inguinal wound in 90 seconds or less (steps 2-3).

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, 6 inch elastic bandage, kerlix, 2 cravats, combat gauze, 3 inch tape, stop watch, and an assistant to hold pressure. Casualty's belt and all belt loops are intact.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Pack inguinal wound with Combat Gauze and verbalize assistant to hold pressure for 3 minutes.			
Evaluator: "bleeding has been controlled," if packed properly. **Evaluator: "bleeding is NOT controlled," if NOT packed properly, time continues (SM may re-pack at this time).**	**X**	**X**	**X**
4. Ensure the gauze extends 1-2 inches above the skin (if gauze does not extend 1-2 inches above skin place additional gauze), and flex the casualty's knee slightly.			
5. Feed a cravat under the casualty's belt on the lateral aspect of the injured leg and tape the free running end of cravat to lower leg.			
6. Ensure casualty's belt is tight.			
7. Place elastic bandage over the dressing leaving a tail.			
8. Wrap the wound circumferentially, ensuring all packing material is covered and that the elastic bandage is over the top of the free running end of the cravat.			
9. Continue to wrap the wound, wrapping on alternating sides of the tail, while maintaining tension/pressure. Cover all packing material and secure the dressing by tying a non-slip knot with the end of the elastic bandage and tail.			
10. Un-tape free running end of cravat from lower leg, pull cravat upwards towards belt, and secure using a non-slip knot, and straighten leg.			
Evaluator: "Prepare the casualty for transport."	**X**	**X**	**X**
11. Secure the tails and knots of the elastic bandage and cravat with 3 inch tape, wrapping a minimum of 1-1/2 times around.			
12. Swathe legs together 2-3 inches above the knee.			
13. Continue to assess wound for further bleeding.			
CRITICAL CRITERIA			
Failed to complete steps 2-3 to pack and effectively control bleeding in 90 seconds. **Time:_____/_____/_____**			
Failed to check for exit wound.			
Failed to correctly state the 3 minute time requirement for holding pressure.			
Failed to completely cover packing material.			
Failed to pull cravat upwards towards belt and secure cravat.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Student Name:_____ Team: _____ Date:_____

Instructor:
1st_____2nd_____3rd_____

PRESSURE DRESSING-AXILLARY

Conditions: While in the Tactical Field Care phase, you encounter a casualty who is bleeding externally from an axillary wound that requires packing and a pressure dressing.

Standards: Control bleeding by packing and applying a pressure dressing to an axillary wound in 90 seconds or less (steps 2-3).

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, 2 cravats, kerlix, combat gauze, 3 inch tape, 6 inch elastic bandage, stop watch, and an assistant to hold pressure.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Pack axillary wound with Combat Gauze and verbalize assistant to hold pressure for 3 minutes.			
Evaluator: "bleeding has been controlled," if packed properly. **Evaluator: "bleeding is NOT controlled," if NOT packed properly, time continues (SM may re-pack at this time).**	**X**	**X**	**X**
4. Ensure the gauze extends 1-2 inches above the skin (if gauze does not extend 1-2 inches above skin place additional gauze).			
5. Place 6" elastic bandage over shoulder, leaving tail parallel to arm on injured side, with remainder of elastic bandage cover packing material and going in anterior direction.			
6. Pull elastic bandage taut over packing material and wrap **tightly** around injured shoulder (minimum of 3 wraps).			
7. Maintaining tension, continue to wrap across back anchoring on opposite shoulder in a "Figure 8 pattern.			
8. Secure and tie a non-slip knot to the remainder of elastic bandage tails.			
Evaluator: "Prepare the casualty for transport."	**X**	**X**	**X**
9. Secure elastic bandage tails and knot with 3 inch tape wrapping a minimum of 1-1/2 times around tail and knot.			
10. Swathe arm to torso.			
11. Continue to assess wound for further bleeding.			
CRITICAL CRITERIA			
Failed to complete steps 2-3 to pack and effectively control bleeding in 90 seconds. **Time:_____/_____/_____**			
Failed to check for exit wound.			
Failed to correctly state the 3 minute time requirement for holding pressure.			
Failed to completely cover packing material.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ Team: _____ Date:_____

Instructor:
1st_____2nd_____3rd_____

PRESSURE DRESSING-NECK

Conditions: While in the Tactical Field Care phase, you encounter a casualty who is bleeding from a penetrating neck wound that requires packing and a pressure dressing.

Standards: Control bleeding by packing and applying a pressure dressing to a neck wound in 90 seconds or less (steps 2-3).

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, 6 inch elastic bandage, 2 cravats, kerlix, combat gauze, 3 inch tape, stop watch, and an assistant to hold pressure.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Expose the injury, assess, and check for an exit wound.			
3. Pack neck wound with Combat Gauze and verbalize to direct the assistant to hold pressure for 3 minutes.			
Evaluator: "bleeding has been controlled," if packed properly. **Evaluator: "bleeding is NOT controlled," if NOT packed properly, time continues (SM may re-pack at this time).**	**X**	**X**	**X**
4. Ensure the gauze extends 1-2 inches above the skin (if gauze does not extend 1-2 inches above the skin, place additional gauze).			
5. Place 6" elastic bandage over the dressing leaving a tail. Wrap the elastic bandage, covering the packing material, in anterior direction under the opposite arm.			
6. Continue to wrap around neck and under arm pulling elastic bandage **tightly** for pressure, covering the packing material.			
7. Secure dressing by tying a non-slip knot with end of elastic bandage and tail.			
Evaluator: "Prepare the casualty for transport."	**X**	**X**	**X**
8. Secure elastic bandage tails and knot with 3 inch tape wrapping a minimum of 1-1/2 times around tail and knot.			
9. Swathe arm to torso.			
10. Continue to assess wound for further bleeding.			
CRITICAL CRITERIA			
Failed to complete steps 2-3 to pack and apply effective pressure in 90 seconds. **Time:_____/_____/_____**			
Failed to check for exit wound.			
Failed to correctly state the 3 minute time requirement for holding pressure.			
Failed to completely cover packing material.			
Wrapped elastic bandage completely around neck.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ Team: _____ Date:_____

Instructor:

1st_____2nd_____3rd_____

SURGICAL CRICOTHYROIDOTOMY

Conditions: While in the Tactical Field Care phase, you encounter an unconscious casualty with an upper airway obstruction. The casualty's airway cannot be maintained using manual methods.

Standards: Establish an effective surgical airway in a casualty in 4 minutes or less (Steps 1-14).

Required equipment and supplies: ballistic helmet, individual body armor, a combat life saver, scalpel, alcohol wipes, endotracheal tube (minimum lumen width of 6.0 mm), Cric Kit, 10ml syringe, tracheal hook, stethoscope, BVM, pulse oximeter, exam gloves, 1 inch tape, 2x2 gauze pads, stop watch, and a deluxe difficult airway trainer.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Identify the cricothyroid membrane between the cricoid and thyroid cartilages.			
3. Clean the site with alcohol wipe.			
4. Stabilize the larynx with non-dominant hand. Confirm landmarks with dominant index finger.			
5. Make a 1 inch vertical incision through the skin over the cricothyroid membrane.			
6. Reconfirm cricothyroid membrane with index finger.			
7. Turn scalpel horizontally and poke through the cricothyroid membrane. Make 1/2 inch incision.			
8. Insert tracheal hook and elevate the cricoid cartilage.			
9. Insert the end of the tube fully into the trachea and direct towards the lungs. Remove obturator (if applicable). If using an ETT, insert 1/4- 1 inch beyond the cuff.			
10. Inflate the cuff with 10 ml of air.			
11. Direct combat lifesaver (CLS) to ventilate the casualty twice with a BVM. The medic will **auscultate the apex of the right and left lung** and **watch for equal rise and fall of the chest to confirm tube placement.**			
Evaluator: If there is <u>equal</u> rise and fall of the chest, respond with: "You hear breath sounds in all lung fields." / **Evaluator: If there is <u>not</u> equal rise or fall of the chest, respond with "no breath sounds are heard in the lung field(s)" (SM may correct tube placement).**	**X**	**X**	**X**
12. Assess casualty for spontaneous respirations. (must count for 10 seconds) and attach pulse oximeter to casual			
Evaluator: When would you assist a casualty with ventilations?	**x**	**x**	**x**
13. **<u>Respond with</u>**: "Assist when respirations are <8 or >30 BPM or a pulse oximeter reading <90%".			
Evaluator: " In 10(ten) seconds you heard ___/____/___respiration(s) (Instructor must fill in number of respiration(s) given to student).	**x**	**x**	**x**
14. If respirations are <8 or >30 or pulse oximeter reading is <90%, direct the combat lifesaver to ventilate the casualty with a BVM.			
15. Apply a dressing around the tube.			
16. Secure device to the casualty around casualty's neck with strap or tape.			
CRITICAL CRITERIA			
Failed to perform steps 1-14 in 4 minutes or less. **Time:_____/_____/_____**			
Failed to stabilize the larynx.			
First incision through skin was anything other than a vertical incision.			
Improperly placed tube in the trachea - either wrong direction, too deep, or too shallow.			
Failed to auscultate apex of right and left lung to confirm tube placement.			
Failed to assess for spontaneous respiratory effort or failed to ventilate when respirations are needed.			
Failed to secure the device around the casualty's neck properly.			
Failed 5 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Student Name:_____ **Team:**_____ **Date:**_____

Instructor: 1st_____**2nd**_____**3rd**_____

OCCLUSIVE DRESSING

Conditions: While in the Tactical Field Care phase, you encounter a casualty with an open chest wound with or without respiratory compromise.

Standards: Treat an open chest wound(s) in 3 minutes or less (steps 1-9).

Required equipment and supplies: ballistic helmet, individual body armor, bandage scissors, 3 inch tape, exam gloves, occlusive material, commercial chest seal, and a tension pneumothorax manikin with uniform top on it.

		Attempts		
ACTIONS:		**1st**	**2nd**	**3rd**
1. Take body substance isolation.				
2. Expose and assess injury.				
3. Upon full expiration, cover the wound with large, occlusive dressing. (Cover the first wound encountered.)				
Commercial Chest Seal (entrance wound)		**X**	**X**	**X**
4. Ensure material extends 2” beyond the edge of the wound.				
5. Log roll the casualty or have the conscious casualty sit up and examine the back for an exit wo				
6. If present, cover the exit wound on expiration with a large, occlusive dressing.				
Improvised Chest Seal (exit wound)		**X**	**X**	**X**
7. Ensure material extends 2” beyond the edge of the wound. Tape four sides of occlusive dressing down.				
8. Place casualty in sitting position or injured side down in the recovery position.				
9. Verbalize continued assessment of casualty for signs of progressive respiratory distress.				
****Evaluator: "Your casualty displays signs of progressive respiratory distress.**	**Evaluator: "Your casualty does not display signs of progressive respiratory distress.**	**X**	**X**	**X**
See Needle Chest Decompression Skill Sheet. Performance begins at Step 2.	Skill is complete	**X**	**X**	**X**
CRITICAL CRITERIA				
Failed to complete steps 1-9 in 3 minutes or less. **Time:**_____/_____/_____				
Failed to check and/or dress the exit wound.				
Failed to use both Commercial and Improvised dressings to seal the wounds.				
Occlusive dressing did not adhere to the chest wall.				
Failed to assess the casualty for progressive respiratory distress.				
Failed 3 or more steps.				
Failed to perform as a competent medic.				
G (GO) or No Go (NG):				

** For use when evaluating the Occlusive Dressing with the Needle Chest Decompression.

** Improvised chest seal **MUST** be taped on **ALL FOUR** sides to adhere to the chest wall.

Instructor comments:

Student Name:_____ **Team:**_____**Date:**_____

Instructor: 1st_____**2nd**_____**3rd**_____

NEEDLE CHEST DECOMPRESSION

Conditions: While in the Tactical Field Care phase, you encounter a conscious, breathing casualty that has penetrating torso trauma with an occlusive dressing previously applied to their wound.

Standards: Perform a needle chest decompression in 3 minutes or less (steps 3-11).

Required equipment and supplies: ballistic helmet, individual body armor, 10 or 14 gauge, 3-1/4 inch needle catheter, 18 gauge needle and catheter, alcohol wipes, 3 inch tape, exam gloves, and a tension pneumothorax manikin with a uniform top on it.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Assess casualty to ensure condition is due to progressive respiratory distress secondary to torso			
Evaluator: Your casualty displays signs of progressive respiratory distress. **Evaluator: Right side ___ Left side__ has no rise and fall of the chest and absent breath sounds.**	**x**	**x**	**x**
3. Identify 2nd intercostal space at the MCL, directly above the 3rd rib on the injured side or 5th intercostal space at the AAL, directly above the 6th rib on the injured side.			
4. Prepare area with an antiseptic solution.			
5. Choose appropriate needle catheter (10 or 14 gauge needle, 3 1/4 inches).			
6. Remove luer lock cap from needle catheter, if applicable.			
7. Insert needle catheter over the top of the rib, at a 90 degree angle to the chest wall, to the hub. Leave needle catheter in place for 10 seconds to evacuate air from the pleural space of the chest.			
8. Remove needle, leaving the catheter in place.			
9. Secure the catheter hub to chest.			
10. Place casualty in sitting position or in recovery position with injured side down.			
11. Verbalize continued reassessment of casualty for reoccurrence of respiratory distress.			
CRITICAL CRITERIA			
Failed to perform steps 3-11 in 3 minutes or less. **Time:_____/_____/_____**			
Failed to place needle in appropriate location.			
Failed to select appropriate gauge and size needle catheter.			
Failed to remove needle.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG			

Instructor comments:

Student Name:_____ Team:_____ Date:_____

Instructor: 1st_____ 2nd_____
3rd_____

Initiate a Direct Line I.V.

Conditions: While in the Tactical Field Care phase, you encounter a casualty **with absent** radial pulses, altered mental status, and significant injuries that requires fluid resuscitation.

Standards: Initiate an intravenous infusion to the casualty in 5 minutes or less (steps 1-17).

Required equipment and supplies: ballistic helmet, individual body armor, IV administration set, IV solution, 18 gauge catheter-over-needle, constricting band, alcohol wipes, 2 x 2 gauze, 1 inch tape, large transparent dressing, IV stand or substitute, eye protection, stop watch, exam gloves, sharps container, and an Ambu IV trainer with simulated blood.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Gather, inspect and prepare equipment.			
3. Spike IV bag and properly prepare IV tubing.			
4. Apply constricting band.			
5. Cleanse site with alcohol wipe, uncap the needle.			
6. Hold skin taut distal to the site of venipuncture with non-dominant hand.			
7. Hold needle at a 20-30 degree angle, bevel up, over top of the venipuncture site.			
8. Pierce skin and advance needle/catheter until blood is visualized in the flash chamber.			
9. Decrease the angle of the needle/catheter to 10-15 degree and advance 1/8 of an inch.			
10. Advance the catheter until the hub touches the skin or until significant resistance is felt.			
11. Release the constricting band with the non-dominant hand.			
12. Occlude the vein with the non-dominant hand.			
13. Remove the needle and place it in a sharps container.			
14. Connect IV tubing, place a strip of 1 inch tape over the hub, and initiate flow of fluids.			
15. Verbalize and assess IV site for any signs/symptoms of infiltration.			
16. Cover with a transparent dressing.			
17. Secure IV tubing to the casualty.			
CRITICAL CRITERIA			
Failed to perform steps 1-17 in 5 minutes or less. **Time:_____/_____/_____**			
Failed to initiate flow of fluids.			
Failed to properly prepare IV tubing.			
Failed to secure IV tubing (tape, transparant dressing, and tape wrist).			
Failed 6 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ **Team:**_____ **Date:**_____

Instructor: 1st_____ **2nd**_____
3rd_____

INITIATE SALINE LOCK

Conditions: While in the Tactical Field Care phase, you encounter a casualty **with** radial pulses and significant injuries.

Standards: Obtain IV access for the casualty in 5 minutes or less (steps 1-15).

Required equipment and supplies: ballistic helmet, individual body armor, sterile IV solution for flush, 18 gauge catheter-over-needle, 18 gauge needle, 5ml syringe, saline lock, constricting band, alcohol wipes, 2 x 2 gauze, large transparent dressing, eye protection, exam gloves, stop watch, sharps container, and an Ambu IV trainer with simulated blood.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Gather, inspect and prepare equipment.			
3. Apply constricting band.			
4. Cleanse site with alcohol wipe, uncap the needle.			
5. Hold skin taut distal to the site of venipuncture with non-dominant hand.			
6. Hold needle at a 20-30 degree angle, bevel up, over top of the venipuncture site.			
7. Pierce skin and advance needle/catheter until blood is visualized in the flash chamber.			
8. Decrease the angle of the needle/catheter to 10-15 degree and advance 1/8 of an inch.			
9. Advance the catheter until the hub touches the skin or until significant resistance is felt.			
10. Release the constricting band with the non-dominant hand.			
11. Occlude the vein with the non-dominant hand.			
12. Remove the needle and place it in a sharps container.			
13. Connect a saline lock and place a strip of 1 inch tape over the hub.			
14. Clean saline lock, uncap syringe, aspirate and flush site with 5ml of sterile IV solution			
15. Cover both the hub and saline lock with a transparent dressing.			
CRITICAL CRITERIA			
Failed to perform steps 1-15 in 5 minutes or less. **Time:**_____/_____/_____			
Failed to aspirate and/or flush saline lock.			
Failed 5 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ **Team:**_____ **Date:**_____

Instructor: 1st_____ **2nd**_____
3rd_____

F.A.S.T. 1
STERNAL INTRAOSSEOUS

Conditions: While in the Tactical Field Care phase, you encounter a casualty with absent radial pulses, altered mental status, and significant injuries that requires fluid resuscitation using a F.A.S.T. 1 intraosseous device after 2 failed IV attempts. Your IV solution and tubing is properly set up and drained.

Standards: Initiate an intraosseous infusion to the casualty in 3 minutes or less (steps 1-13).

Required equipment and supplies: ballistic helmet, individual body armor, F.A.S.T. 1 sternal intraosseous set, alcohol wipes, 5ml syringe, 18 gauge needle, flush solution, 1 inch tape, Hextend IV solution (**See note ****) with IV tubing properly set up and drained, exam gloves, stop watch, sterile IV solution for flush, sharps container, IV stand or substitute.

Note: ** Hextend is substituted with normal saline that is marked "HEXTEND" for training.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Gather, inspect, and prepare flush and equipment.			
2. Don BSI, if not completed			
3. Locate suprasternal notch landmark.			
4. Cleanse site with alcohol wipe.			
5. Place target patch at landmark.			
6. Recheck the location of the target patch.			
7. Place bone needle cluster into the target zone of the target patch. Maintain perpendicular aspect of the introducer to the sternal surface.			
8. Apply increasing pressure along introducer axis until release is felt and heard.			
9. Gently remove the introducer by pulling straight back.			
10. Connect the infusion tube to the right angle connector on the target patch.			
Evaluator: "You have a return of bone marrow in the infusion tube."	**X**	**X**	**X**
11. Connect syringe and flush the infusion tube with 5ml of sterile IV solution.			
12. Connect the IV infusion tubing and initiate flow of fluids.			
13. Attach the protective dome to target patch and secure with tape.			
CRITICAL CRITERIA			
Failed to complete steps 1-13 in 3 minutes or less. **Time:**_____/_____/_____			
Failed to locate the suprasternal notch and/or applied device in wrong location.			
Failed to keep introducer perpendicular to the sternal surface.			
Applied pressure along the introducer with extreme force, twisting or jabbing motions.			
Failed to flush or flushed the infusion tube with a needle attached to syringe.			
Failed to initiate flow of fluids.			
Failed 4 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ **Team:**_____ **Date:**_____

Instructor: 1st_____ **2nd**_____
3rd_____

I-GEL AIRWAY

Conditions: While in the Tactical Field Care phase, you encounter an unconsious casualty that requires the insertion of a supraglottic airway using an I-GEL. An assistant is performing resuscitative measures. No cervical spine injury is present.

Standards: Insert the I-GEL and successfully ventilate the casualty without causing further injury in 5 seconds or less

Required equipment and supplies: ballistic helmet, individual body armor, exam gloves, an assistant, I-GEL, stethoscope, BVM, pulse oximeter, 1 inch tape, stop watch, lubricant, and a deluxe difficult airway trainer.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Select proper size I-GEL based on casualty's weight (size 5 (200+ lbs); size 4 (110-200 lbs); size 3 (65-130 lbs)).			
3. Open the I-Gel package; remove the device from the cage pack(cradle) and transfer to the lid			
4. Place a small bolus of water based lubricant on smooth inner surface of the cage pack. Grasp I-GEL along the bite block; lubricate front, back and sides of the cuff with a thin layer of lubricant.			
5. Place casualty on their back in the sniffing position. Inspect upper airway for visible obstructions and remove dentures or plates if present. Press gently down on casulaty's chin to			
6. Grasp the lubricated I-GEL firmly along the integrated bite block and position the device so that the I-GEL cuff outlet is facing toward the casualty's chin. Introduce the leading soft tip into			
7. Glide the device downward and backward along the hard palate with a continuous gentle push until a **definitive resistance** is felt and the integral bite block rests on the casualty's incisors.			
8. Attach a BVM to the I-GEL and gently ventilate the casualty while watching for rise and fall of the chest.			
9. Instruct assistant to take over ventilations with the BVM, auscultate lung fields to ensure placement of device and attach pulse oximeter.			
10. Secure the I-GEL in place with 1 inch tape, wrapping around the I-GEL and securing maxilla to maxilla.			
CRITICAL CRITERIA			
Failed to complete steps 6-7 in 5 seconds or less. **Time:_____/_____/_____**			
Failed to insert the I-GEL at the proper depth or place within three attempts.			
Failed to auscultate lungs to check for proper placement.			
Failed four or more steps.			
Failed to secure the device to casualty.			
Failed to perform as a cmpetent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ **Team:**_____ **Date:**_____

Instructor: 1st_____ **2nd**_____ **3rd**_____

KING LT AIRWAY

Conditions: While in the Tactical Field Care phase, you encounter an unconscious casualty that requires the insertion of an esophageal airway using a KING LT. An assistant is performing resuscitative measures. No cervical spine injury

Standards: Insert the KING LT and successfully ventilate the casualty without causing further injury (steps 1-14).

Required equipment and supplies: ballistic helmet, individual body armor, an assistant, KING LT, syringe (provided in kit based on size), stethoscope, BVM, pulse oximeter, exam gloves, 1 inch tape, stop watch, and a deluxe difficult airway trainer.

	Attempts		
ACTIONS:	**1st**	**2nd**	**3rd**
1. Take body substance isolation.			
2. Inspect upper airway for visible obstruction.			
3. Direct assistant to hyperventilate the casualty for a minimum of 30 seconds.			
4. Inspect, gather, and test equipment. Test cuff and inflation system for leaks by injecting the maximum recommended volume of air into the cuffs (size 3 - 60 ml; size 4 - 80 ml; size 5 - 90 ml). Remove all air from both cuffs prior to insertion.			
5. Apply lubricant to beveled distal tip and posterior aspect of the tube.			
6. Position the head in the "sniffing position". Verbalize alternate position is the "neutral" position.			
7. Hold KING LT at the connector with dominant hand. With non-dominant hand perform a tongue/chin lift.			
8. With the KING LT on the corner of the mouth, rotate it laterally 45-90 degrees, such that the blue orientation line is touching the corner of mouth. Introduce tip into mouth and advance behind base of tongue.			
9. As tube tip passes the back of tongue, rotate tube back to midline (blue orientation line faces chin).			
10. Without exerting excessive force, advance tube until base of connector is aligned with teeth or gums.			
11. Using the syringe provided, inflate the cuffs of the KING LT with the appropriate volume of air (Size 3: 45-60 ml, size 4: 60-80 ml; size 5: 70-90 ml).			
12. Attach BVM to the KING LT. While gently bagging the casualty to assess ventilation, simultaneously withdraw the KING LT until ventilation is easy and free flowing (large tidal volume with minimal airway pressure).			
13. Direct combat lifesaver to ventilate casualty with the BVM, auscultate lung fields and watch for rise and fall of the chest to confirm tube placement. Attach pulse oximeter.			
14. Secure device to the casualty.			
CRITICAL CRITERIA			
Failed to perform steps 1-14.			
Failed to test or properly inflate the cuffs once the device was inserted.			
Failed to insert the KING LT at the proper depth or place within 3 attempts.			
Failed to auscultate lungs to confirm placement.			
Failed to secure device to casualty.			
Failed 5 or more steps.			
Failed to perform as a competent medic.			
G (GO) or No Go (NG):			

Instructor comments:

Student Name:_____ **Team:**_____**Date:**_____

Instructor:

1st_____**2nd**_____**3rd**_____