

EFMB Test Score Sheet TCCC — INITIATE A SALINE LOCK AND INTRAVENOUS INFUSION (For use of this form, see AMEDDC&S HRCOE Pam 350-10, the proponent is MCCS-OPE)		
CANDIDATE'S RANK AND NAME	CANDIDATE #	
TASK: INITIATE A SALINE LOCK AND INTRAVENOUS INFUSION.		
CONDITIONS: Given a casualty in a simulated combat environment that requires intravenous access and follow on IV fluids. Necessary materials and equipment are available.		
STANDARDS: Perform all steps and measures correctly without causing further injury to the casualty.		
NOTE: THIS TASK HAS BEEN MODIFIED FOR EFMB TESTING PURPOSES ONLY.		
PERFORMANCE STEPS/MEASURES	GO	NO-GO
NOTE: For EFMB testing purposes, the candidate will start the saline lock and then convert it to an IV. Be aware that many combat injuries and conditions might normally require an immediate IV instead of establishing a saline lock first. In addition, the candidate will only be required to perform this task on one casualty.		
1. Take body substance isolation (BSI) precautions.		
NOTE: A mannequin or training aid will be used to initiate a saline lock and intravenous infusion.		
2. Prepare to establish a saline lock.		
NOTE: For EFMB testing purposes, other sizes of needles and catheters may be utilized other than those stated.		
a. Assemble and inspect the necessary equipment for defects, expiration date, and contamination.		
(1) 20 gauge IV catheter/needle x2.		
(2) 21 gauge 1 ¼" needle.		
(3) Saline lock adapter plug.		
(4) Adhesive tape.		
(5) Alcohol and Betadine® swabs.		
(6) Constricting band.		
(7) 5cc syringe.		
(8) Sterile fluid.		
b. Explain the procedure and the purpose of the saline lock to the casualty.		
c. Place the casualty in a comfortable position with the arms supported.		
d. Select catheter insertion site.		
e. Prepare the insertion site. Apply constricting band 2" above venipuncture site (tight enough to stop venous flow, but not so tight that the radial pulse cannot be felt).		
f. Clean skin with an alcohol and/or Betadine® swab in a circular motion from the center outward.		
3. Insert the saline lock.		
a. Perform the venipuncture. Hold catheter with dominant hand and remove protective cover without contaminating the needle. Hold flash chamber with thumb and forefinger directly above the vein. Draw skin below the cleansed site downward to hold the skin taut over the site of the venipuncture.		
b. Position the needlepoint, bevel up, parallel to the vein and about 1/2 inch below the venipuncture site. Continue advancing the needle/catheter until the vein is pierced.		
EVALUATOR STATES: "YOU HAVE A FLASH," IF THE CANDIDATE INSERTS THE NEEDLE CORRECTLY.		
c. When "flash" of blood enters the flash chamber, decrease the angle between the skin and needle until the angle is almost parallel to the skin, and advance further to secure catheter placement in the vein.		

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d. Place pressure on the vein above the insertion site by pressing with one finger of the non-dominant hand. Release the constricting band.		
e. Remove the needle after advancing the plastic catheter into the vein.		
EVALUATOR: ADMINISTRATIVELY GAIN CONTROL OF THE NEEDLE AND PLACE IT IN A SHARPS CONTAINER.		
f. Quickly uncap and insert the male end of the saline lock adapter plug into the hub of the catheter.		
g. Apply adhesive tape to secure the hub of plastic catheter. Cover both the hub and saline lock with a transparent dressing.		
h. Flush the IV catheter. Using the 21-gauge needle and 5 cc syringe filled with sterile fluid, penetrate the transparent dressing and insert the needle into the saline lock. Inject 5cc of sterile fluid into the IV catheter.		
i. Verbally state they are looking for signs of infiltration.		
EVALUATOR STATES: "THERE ARE NO SIGNS OF INFILTRATION."		
EVALUATOR STATES: "CASUALTY NEEDS FLUIDS" OR STATES REASONS WHY NEEDED (I.E., THE CASUALTY IS SUFFERING FROM SEVERE LOSS OF BLOOD, EXHIBITING ABSENT OR WEAK PERIPHERAL PULSES, AND AN ALTERED MENTAL STATUS, AND OTHER SIGNS AND SYMPTOMS OF HYPOVOLEMIC SHOCK).		
4. Convert the saline lock to a continuous infusion IV.		
a. Explain the procedure and the purpose of the IV to the casualty.		
b. Assemble and inspect the necessary equipment for defects, expiration date, and contamination (if applicable).		
NOTE: If a casualty is anticipated to need significant blood transfusion (for example: presents with hemorrhagic shock, one or more major amputations, penetrating torso trauma, or evidence of severe bleeding), Administer 1 gram of Tranexamic Acid (TXA) in 100 cc Normal Saline or Lactated Ringers as soon as possible but not later than 3 hours after injury. Begin second infusion of 1gm TXA after Hextend or other fluid treatment.		
NOTE: In order to conserve resources, a crystalloid solution such as lactated ringers or normal saline may be used with a notional label of Hextend® placed on the bag for EFMB testing.		
(1) Fluids, spike, drip chamber, tubing, and needle adapter. Discard them if there are cracks or holes or if any discoloration is present.		
(2) Tubing clamp. Ensure that the clamp releases and catches.		
(3) 20 gauge IV catheter/needle for insertion into saline lock; discard if it is flawed with barbs.		
EVALUATOR STATES: "THERE ARE NO DEFECTS IN THE EQUIPMENT OR FLUIDS."		
c. Prepare the equipment.		
(1) Clamp the tubing 6 to 8 inches below drip chamber.		
(2) Remove the protective covers from the spike and the outlet of the container.		
CAUTION: DO NOT TOUCH THE SPIKE OR THE OUTLET OF THE IV CONTAINER.		
(3) Insert spike into container.		
(4) Hang the container at least 2 feet above the level of the casualty's heart.		
(5) Squeeze the drip chamber until it is half full of IV fluid.		
(6) Prime tubing.		
NOTE: Ensure IV fluid has flowed completely through the tubing.		
d. Clean the rubber diaphragm of the saline lock with an antiseptic wipe.		
e. Remove protective cover without contaminating the needle of the 20 gauge IV catheter/needle and insert bevel up into the rubber diaphragm of the saline lock.		
f. Place pressure on the vein above the insertion site by pressing with one finger of the non-dominant hand and remove the needle after advancing the catheter into the saline lock.		
g. Quickly uncap and insert the male end of the needle adapter into the hub of the catheter.		

h. Set the roller clamp on the IV tubing and observe the site and ensure that normal flow is occurring.		
EVALUATOR STATES: "YOU HAVE NORMAL FLOW."		
NOTE: If the IV is not patent, do not continue with the conversion. Remove the saline lock and IV catheter and establish a new IV site.		
5. Secure the site.		
b. Loop the IV tubing onto the extremity and secure the loop with tape.		
6. Readjust the flow rate.		
NOTE: If after 30 minutes the casualty still has no peripheral pulse or still has altered mental status, administer a second 500-ml of Hextend®. If the casualty is still in shock after this, the casualty could possibly still be bleeding.		
7. Recheck site for infiltration and verbally states they are looking for signs of infiltration.		
EVALUATOR STATES: "THERE ARE NO SIGNS OF INFILTRATION."		
8. Met all administrative requirements for this task		
REASON(S) FOR FAILURE	DOES THE CANDIDATE WISH TO REBUT THIS TASK? (CANDIDATE INITIALS APPROPRIATE BOX)	YES NO
LANE OIC/NCOIC INITIALS	EVALUATOR'S SIGNATURE	DATE