

INITIATE AN INTRAVENOUS INFUSION

For use of this form see TC 8-800; the proponent agency is TRADOC.

TABLES: I, III
REFERENCES: STP 8-68W13-SM-TG, Tasks: 081-833-0033, Initiate an Intravenous Infusion; 081-833-0034, Manage an Intravenous Infusion; Prehospital Trauma Life Support(*PHTLS*), Revised Military Edition.

1. Soldier (Last Name, First Name, MI)

2. Date (YYYYMMDD)

CONDITIONS: Given an intravenous therapy trainer or a Soldier acting as a casualty in a simulated combat environment. You are not in a CBRN environment.

The timely and appropriate use of intravenous therapy by the Soldier Medic could make the difference between a casualty dying of the wounds received or surviving evacuation to the next level of care.

STANDARDS: Perform all measures IAW the standards of evaluation outlined in C168W144/1 Tactical Combat Casualty Care. You must score at least 70% (15 of 21 steps) and not miss any critical (*) elements on the skill sheet.

- SAFETY:**
- o Risk Assessment: Medium. All bodily fluids should be considered potentially infectious; always observe body substance isolation (BSI).
 - o Precautions: Wear gloves and eye protection as a minimal standard of protection.
 - o Environmental: None

NOTE: Soldier Medics must be observed. (Evaluator to Soldier Medic ratio is 1:6).

NOTE: This invasive procedure has the risk of accidental needle stick; this risk is profoundly minimized by adequate direct supervision and ongoing instruction during the practical exercise. See DA Pam 40-11, Preventive Medicine.

TEST SCENARIO:

The lead Stryker infantry carrier vehicle traveling directly in front of your vehicle has been struck by an IED. After securing the immediate area, the casualties are moved to safety. Following your initial and rapid trauma assessment you determine, due to the casualty's decreased level of consciousness and loss of radial pulse, that you must establish peripheral intravenous access for one of the casualties in order to initiate fluids; you have been provided the necessary medical equipment.

3. Evaluator's Comments and After-Test Recommendations:

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**INITIATE AN INTRAVENOUS INFUSION
GRADING SHEET**

TASK	COMPLETED					
	1ST		2ND		3RD	
	P	F	P	F	P	F
4.						
a. * Took/verbalized body substance isolation (BSI) precautions.	<input type="checkbox"/>					
b. Assembled the necessary equipment.	<input type="checkbox"/>					
c. Explained the procedure to the casualty (if conscious) and asked about known allergies.	<input type="checkbox"/>					
d. * Prepared and inspected equipment.	<input type="checkbox"/>					
e. Selected a suitable vein. EVALUATOR: Observe to ensure there is no violation of aseptic technique; if in doubt, discard the catheter, obtain new equipment, and repeat the step.	<input type="checkbox"/>					
f. Prepared the venipuncture site.	<input type="checkbox"/>					
g. * Donned gloves.	<input type="checkbox"/>					
h. Performed the venipuncture. EVALUATOR: Observe to ensure there is no violation of aseptic technique; if in doubt, discard the tubing and solution, obtain new equipment, and repeat the step.	<input type="checkbox"/>					
i. * Removed the constricting band. EVALUATOR: Administratively gain control of the needle and place in a sharps container.	<input type="checkbox"/>					
j. Obtained venous blood samples as required.	<input type="checkbox"/>					
k. Attached the administration tubing to the cannula hub while maintaining stabilization of the hub with their nondominant hand.	<input type="checkbox"/>					
l. Opened the flow-regulator clamp and observed for drips in the drip chamber. Allowed the fluid to run freely for several seconds. (May drop the solution bag lower than the casualty's heart to observe for a backflash of blood to verify catheter placement.)	<input type="checkbox"/>					
m. Adjusted to the desired flow rate.	<input type="checkbox"/>					
n. Cleansed the area of blood if necessary, and secured the hub of the catheter with tape, leaving the hub and tubing connection visible. Made a small loop in the IV tubing and placed a second piece of tape over the first to secure the loop.	<input type="checkbox"/>					
o. Applied a 2x2, 4x4, or a transparent dressing over the venipuncture site.	<input type="checkbox"/>					
p. Labeled a piece of tape with date/time initiated, catheter size, and their initials; secured the tape over the dressing.	<input type="checkbox"/>					
q. Monitored the casualty and continued to observe the venipuncture site for signs of infiltration. Discontinued the infusion if signs were observed.	<input type="checkbox"/>					
r. Removed gloves and disposed of them appropriately.	<input type="checkbox"/>					
s. Documented the procedure on the appropriate medical form.	<input type="checkbox"/>					
t. * Obtained peripheral venous access in three or fewer attempts.	<input type="checkbox"/>					
u. * Did not violate aseptic technique.	<input type="checkbox"/>					
* CRITICAL ELEMENTS						

INITIATE AN INTRAVENOUS INFUSION EVALUATOR GUIDELINES AND INSTRUCTIONS

Inform the Soldier Medic of the CONDITIONS and STANDARDS as stated on this form.

Provide an optional scenario, if appropriate. This scenario should reinforce the unique or particular needs of the unit.

Allow sufficient time for the Soldier Medic to extract information from the scenario.

Provide each evaluator with the grading sheet.

Ensure the Soldier Medic has all required materials.

Explain how the exercise is graded.

Resource Requirements:

Evaluator: Grading sheet and applicable scenario.

Soldier Medic: Applicable scenario, medical aid bag stocked with a basic load to include IV solution and administration set.

Additional Scoring Guidelines:

Prepared and inspected equipment.

- o IV solution (*expiration date, solution clarity, presence of punctures*).
- o Catheter (*sterility, presence of barbs*). Did not touch any part of the catheter that enters the skin/vein.
- o Micro/macro drip administration set.
- o Stretched out the IV tubing and closed off the flow-regulator clamp.
- o Removed the protective covering from the port of the IV container and the protective covering from the spike of the administration set. Inserted the administration tubing spike into the IV solution port with a quick twist.
- o Hung the IV solution container at least 2 feet above the level of the casualty's heart and squeezed the drip chamber until it was half full.
- o Removed the protective cap from the tubing adapter and opened the flow-regulator clamp allowing the fluid to flush all of the air from the tubing; reclosed the flow-regulator clamp and recapped the tubing adapter.

NOTE: Did not lose sight of the distal end of the tubing once uncapped.

- o Cut several strips of tape and hung them where they were readily accessible.

Prepared the venipuncture site.

- o Applied a constricting band 2 inches above the venipuncture site, tight enough to occlude venous flow but not so tight distal pulses were lost.
- o Selected and palpated a prominent vein.
- o Cleansed skin with an antiseptic swab using a circular motion starting with the entry site and extending outward about 2 inches; allowed to dry.

Performed the venipuncture.

- o With the nondominant hand, pulled all local skin taut to stabilize the vein.
- o With the dominant hand, distal bevel of the needle up, inserted the cannula into the vein at an approximately 30 degree angle.
- o Continued until blood was observed in the flash chamber of the catheter.
- o Decreased angle to 15-20 degrees and carefully advanced the cannula approximately 0.5 cm further.
- o While holding the needle stationary, advanced the catheter into the vein with a twisting motion. Inserted the catheter all the way to the hub.
- o Placed a finger over the vein at the catheter tip and tamponaded the vein preventing blood from flowing out the catheter.
- o Removed the needle while maintaining firm catheter control.