

## Adult Intravenous (IV) Injection Training Arm-Basic Model PRODUCT NO.: PC-NUE002.03



### A. PREPARING THE SYNTHETIC BLOOD

1. Be sure the clamp on the IV tubing is closed, and hang the bag no more than 18" above the level of the arm.
2. Attach the fitting end of the IV tubing to one of the shoulder tubes. (Make sure the arm is palm down at this point.)



3. Put the other shoulder tube into a container or basin, gradually “flush” the vascular system with synthetic blood by slowly opening the clamp. Allow some “blood” to pass through the system until the air bubbles have been eliminated.
4. Close the clamp and then turn the arm over so it is palm up. Slowly open the clamp to allow some blood to pass through and to remove any remaining air that is trapped in the system.
5. Once the system is filled, close the clamp on the blood outlet tube. The venous system is now full of “blood” and pressurized. Be sure and leave the clamp on the inlet tubing opened.
6. The arm is now ready to practice drawing blood. “Blood” can be drawn anywhere along the pathway of the vein. Distilled water should be used to prepare the sites. Synthetic blood will actually be aspirated once the vein is properly punctured.
7. Small diameter needles (22- to 23-gauge) should be used.

## B. PREPARING THE ARM FOR INTRAVENOUS INFUSIONS

1. Close the tubing clamp at end of IV bag, then fill with water (distilled water is recommended), and hang not more than 18" above the arm.
2. Appropriate intravenous infusion needles (or butterflies) should be used, and distilled water is recommended as an infusion.
3. The self-sealing simulated veins lend themselves very well to the practice of starting IV infusions, and IV's can be started anywhere along the pathways of the simulated veins. Cleanse the sites with distilled water only.
4. Attach fitting end of the tubing from IV bag into one of the shoulder tubing ends. (Make sure the arm is palm down at this point.)
5. Put the other shoulder tube into a container or basin, and “flush” the vascular system by opening both clamps. Allow infusion (water) to pass through the system until air bubbles are eliminated. Shut off the flow with a plastic clamp. Now turn the arm over so it is palm up. Slowly open the clamp to allow water to pass through and to remove any remaining air that is still trapped. Again, shut off the flow with the plastic clamp. The venous system is now full and pressurized.
6. Insert IV needle or butterfly in vein. “Flashback” will indicate proper insertion.
7. Close clamp on tubing from bag and remove.

## C. RECOMMENDED PROCEDURES FOR SIMULTANEOUS IV INFUSIONS AND

### DRAWING BLOOD

1. Begin with synthetic blood in IV bag. Open two clamps to pressurize system. “Flush” system by allowing “blood” to flow into container until bubbles in tubing disappear. Close the clamp on IV bag and turn the arm over so it is palm up. Open clamp and allow blood to flow until any remaining bubbles in the tubing disappear. Then regulate blood flow from IV bag (using clamp). System is now full of “blood” and pressurized. “Blood” can now be drawn anywhere



2. Intravenous infusion—Insert butterfly into lumen of vein. Proof of correct insertion is evidenced by flashback of “blood.” Insert end of IV tubing into butterfly. Adjust flow to desirable rate with clamp.

## Care and Maintenance

After each class use, pure synthetic blood out from storage bag. Reconnect IV bag to the system. Fill the bag with tap water and flush the venous system, allowing the open end to drain into a container or basin. When the system runs clean, close the clamp and remove the IV bag. Excess water may be removed from the arm by raising the hand, lowering the shoulder, and draining it into a container or basin. Wash outside of arm with Ivory liquid detergent and water. Always remove the plastic clamps from shoulder tubing and drain excess water from veins before storing.

Ordinary stains can be removed by washing with soap and warm water. Newspaper, similar printed paper or plastic will permanently stain the simulator if prolonged contact occurs.

Clean the simulator with a damp cloth, using warm water and neutral detergent. Do not use any abrasive cleaning agents or materials.

Allow trainer to completely dry before storing.

Keep away from sunshine.

## Cautions

1. This Synthetic Blood is specially formulated to be compatible with the self-sealing veins and plastics used in manufacturing the arm.
2. NEVER use synthetic blood for intramuscular injection.
3. DO NOT use dull or burred needles as these will cause leaks in the system.
4. Burred needles will cause permanent damage. Use smaller needles (22- to 23-gauge).
5. DO NOT allow “blood” to dry on simulator—it may stain arm.
6. Use only 500 cc of infusion fluid as a larger amount will also increase the pressure of the venous system, resulting in leaks.
7. DO NOT clean the simulator with solvents or corrosive material as they will damage it.
8. Do not contact with the newspapers or similar printed papers which would permanently stain the simulator. Also avoid marking the simulator with cosmetics, ballpoint pen, pigment, iodine, ect.

If you have any question, please read the instruction carefully or contact

with us.

