

# ANATOMY

## BLOOD PRESSURE AND INJECTION



# BLOOD PRESSURE



## SPS-60 Blood Pressure Simulator

A simulator for teaching physical assessment, this Blood Pressure Simulator helps resolve the uncertainties common in teaching students to take blood pressure.

### Improved features include:

- Redesigned and durable control unit
- Simple calibration procedure
- Palpable radial pulse
- Optional external speakers

This lifelike simulator allows the presetting of values for both systolic and diastolic pressures.

Provides an excellent means to practice listening to and distinguishing blood pressure sounds prior to actual clinical experience. It is possible to audibly discern the five Korotkoff phases. Many times when working with a live subject, pressures are difficult to auscultate, making accurate evaluation of student proficiency almost impossible, and undermining the student's self-confidence. With this realistic unit, the student can find the preset results and the instructor can unfailingly know if the student has performed the procedure accurately. The electronically generated sounds are digitally recorded.

With this realistic unit, the student can find the preset results and the instructor can unfailingly know if the student has performed the procedure accurately. The electronically generated sounds are digitally recorded from MEDCOM/TRAINEX videotapes. Any combination of systolic and diastolic pressures can be dialed into the control unit, and the instructor can control the pulse rate and volume level. An auscultatory gap can be added if desired.

### Control Unit Allows Instructor to:

- Select systolic and diastolic settings
  - Adjust pulse rate
  - Adjust Volume
  - Turn auscultatory gap on or off
  - Easily calibrate unit for use with any sphygmomanometer
- Students:
- Use normal procedure to place cuff on arm
  - Check palpable pulse at the radial site
  - Pump cuff
  - Pressures are activated at release valve
  - Read pressures on sphygmomanometer
  - Auscultate Korotkoff sounds with any stethoscope through a speaker in the arm

Includes Arm Replica with embedded speaker; sphygmomanometer; electronic control unit (six "AA" batteries included); instruction booklet; and hard carrying case. The simulator does not include a stethoscope.

Dimensions: 81 x 25 x 15 cm.

Sh. Wt. 5.44kgs.

## SPS-70 (With AMS-100) SPS-70E (With AMS-100E) Deluxe Blood Pressure Simulator with Speaker System

Includes Blood Pressure Simulator (SPS-60) and an Amplifier/Speaker System (AMS-100 / AMS-100E ). (not Illustrated)

Dimensions: 91 x 31 x 31 cm.

Sh. Wt. 9.53 kgs.



## AMS-100 - 110 Volt AMS-100E - 220 Volt Amplifier/Speaker System

Roland 10 watt amplifier reproduces sounds with extreme clarity. For group presentations. Complete with speaker and wire connections. This Amplifier/Speaker System can be used with Blood Pressure Arms (SPS-60) you may already have. AC. Sh. wt. 3.51 kgs.



## SPS-50 Blood Pressure Arm

PDA technology brings you the newest training device for teaching blood pressure skills. This stand-alone unit incorporates sphygmomanometer placement, palpation of the radial pulse, variable systolic and diastolic pressures from 0-300 mm HG in two mm increments, variable amplitude of sound heard at the antecubital site, sound jack for group listening, auscultatory gap setting, and heart rate settings. This battery operated trainer can be plugged into 110 V a/c to save batteries and comes with the adapter and jack. The PDA is also included, along with the programming and a B/P cuff.



BPS-15

## BPS-15 Blood Pressure Training System

### Features:

- Full size left arm
- Programmable, palpable radial pulse when cuff pressure is less than the selected systolic blood pressure.
- Korotkoff sounds K1 through K4 (K5 is silence) audible between systolic and diastolic pressures.
- Korotkoff sounds are automatically silenced if auscultation gap is selected.
- Korotkoff sounds are automatically adjusted depending upon selected heart rate and the rate of cuff deflation.
- Conventional stethoscope to auscultate Korotkoff sounds in the antecubital area.
- Conventional sphygmomanometer cuff with tubing assembly.
- Programmable Blood Pressure Auscultation Tutor.
- Adjustable systolic and diastolic pressures.
- Adjustable auscultation gap.
- Adjustable pulse rate.
- Display tracks cuff pressure.
- International power supply 100 to 240 VAC.
- Optional speakers with volume control allow students to hear what the individual student hears while using the stethoscope.
- Carrying bag.
- Instruction manual.

## BPS-20 Blood Pressure Training System with Speakers

Same as model BPS-15 and speakers. (Specify 110 or 220 volt power).

# INJECTION

## BIA-63 Advanced Injection Arm

A revolutionary training arm that provides complete venous access for IV therapy and phlebotomy, plus sites for intramuscular and intradermal injections. An extensive 8-line vascular system allows students to practice venipuncture at all primary and secondary locations, including starting IVs and introducing IV catheters. The venous system simplifies set-up with only one external fluid bag supplying artificial blood to all veins simultaneously. The dorsal surface of the hand includes injectable metacarpal, digital, and thumb veins. The antecubital fossa includes the median cephalic, median basilic, and median cubital veins. Venipuncture can also be performed along the basilic, cephalic, accessory cephalic, and median antebrachial veins. Intramuscular injections may be performed in the deltoid muscle and intradermal injection sites are located in the upper arm. Intramuscular injections into the deltoid muscle are enhanced by the soft, lifelike skin and by the natural bony landmarks in the region. Intradermal injections of a specially supplied fluid will create characteristic skin welts at designated sites on the upper arm. Flexion of the wrist helps students develop manipulation skills. The replaceable skin rolls as the veins are palpated, and a discernable "pop" is felt when entering the veins. Valves in the veins can be seen and palpated on the skin surface. Simulated veins and skins are completely replaceable to keep this training arm looking and working like new forever. Under normal use, hundreds of injections may be performed before the veins or skins need to be replaced. Complete replacement kits are available and easy to use. Advanced Injection Arm includes 2 quarts simulated blood, 3 cc syringe, 12 cc syringe, needle, two fluid bags, instruction manual, and carrying case.

Dimensions: 89 x 30 x 15 cm.  
Sh. wt. 9.98 kgs.

### Replacement Parts:

- Skin and Vein Replacement Kit 0421046
- Vein Replacement Kit 0421047
- Blood (1.20 L.) 0421024
- Blood (5.00 L.) 0421028
- Fluid Supply Stand 0421132
- Fluid Supply Bag 0421048
- Ren Cleaner 0421003



BIA-63

## MVE-30 Advanced IV Hand

The ideal simulator for advanced IV training! Now, for the first time, realism is available in an injectable hand simulator. The dorsal surface of the incredibly realistic hand includes injectable metacarpal, digital, and thumb veins. The soft, flexible fingers are molded separately with extreme attention to detail...right down to the fingerprints! Students have the opportunity to develop important manipulation skills provided by the flexion of the wrist. The skin rolls as you palpate the veins, and you'll feel the characteristic "pop" when the vein is entered. The simulated veins and skin are completely replaceable, allowing you to keep your Advanced IV Hand working and looking like new. Under normal use, hundreds of injections may be performed before the veins or skin need to be replaced.

- Replacement Skin and Veins 0421208
- Replacement Veins Only 0421209



## BEI-10 IV Injection Arm

Unique in quality and design, this injection arm allows for realistic training and increased competence of medical staff. Also suitable for group instruction, the arm is made of high quality, and easy-to-clean soft material. Intravenous injection can be practiced as well as the correct puncture of peripheral veins for blood sampling and positioning of a venous catheter. Intramuscular injection (without liquid) can also be practiced. Includes stand, artificial blood, plastic bottle, syringe, and deluxe storage carton.

Dimensions: 74 x 19 x 14 cm. Sh. wt. 3.51 kgs.

### Replacement Parts

- Replacement Skin 1010001
- Artificial Blood Powder and Infusion Set 1010002
- Tubing System 1010003
- Plastic Bottle with Hanger 1010004



## BEI-05 IV Injection Arm and Infusion

This injection arm, made realistic training to teach competence to medical staff. It is also very suitable for group instruction because of its high quality, stain resistance soft material, is ideal for practicing:

- Intravenous injections and infusion.
  - Correct puncture of peripheral veins for blood sampling. The following veins can be punctured: basilic vein, cephalic vein, median cubital vein, dorsal venous rete of and.
  - Delivered with stand, artificial blood, 2 replacement tubing systems, plastic bottle, syringe and deluxe storage PVC.
- Dimensions: 60 x 40 x 20 cm. Sh. wt. 3.60 kgs.

### Replacement Parts

- Replacement Skin 0418002
- Artificial Blood Powder and Infusion Set 0418007
- Tubing System 0418003
- Plastic Bottle with Hanger 0418005

# INJECTION



## SM-66 Intramuscular Injection Simulator

Injection arm that allows realistic training for medical staff. This simulator is designed for developing skills of medical staff in carrying out intra-muscular injection by finding the correct injection region and needle insertion angle. Specific bones can be noticed to ease finding correct position for injections. Made of resistant plastic.

### Features:

- Simulator of an upper arm from elbow to shoulder to be fastened with a belt on the arm of a student.
- Allows practicing of both intra-muscular and subcutaneous injections.
- Buzzer with a light will give a warning sound if the injected part is incorrect.

### Supplied with:

- 9 volt battery (included).
- Carton box for storage.
- Instruction manual

Delivered and completely ready for use, functionally and operationally, user instructions in English.

Packing box measures:

Dimensions: 10 x 42 x 16 cm.

Sh. wt. 2.60 kgs.



## MBV-07 IV Hand and Arm

Realistic forearm and hand, veined with flexible tubing, allows practice of IV placement, injection of fluids, and drawing of blood. Comes with reservoir bags, carrying tray, and simulated blood powder. (Procedure needle not included.) Sh. wt. 3.48 kgs.

- Replacement Skin with Veins 0421460
- Replacement Veins 0421461

## BMS-25



## MIS-45



## VIV-03



## VIV-05



## VIV-03 White / VIV-05 Clear Venatech IV Trainer

This patented IV trainer is so economical each student can have their own for venipuncture practice - no more precious class time wasted waiting for their turn! This IV trainer is easily attached to a person's arm so the student can practice venipuncture techniques on a live subject, including the proper positioning on an actual human arm, without the risks associated with puncturing living tissue. The trainer includes the three main veins used in phlebotomy - cephalic, basilic, and median cubital - all in correct anatomical position. An arterial vessel is present on the trainer for arterial blood gas simulation, and can also be used as a tool for showing how to correct the puncture through a vein into an artery. Besides performing actual IV practice, the trainer helps students learn essential patient communication skills such as explaining the procedure to the patient, asking them to close their fist, etc.

Dimensions: 22 x 17 x 11 cm.

Sh. wt. 0.91 kgs.

## BMS-25 IV Training Arm

This training aid was designed for practice in giving IVs. It permits detailed exercises in venipuncture so that the technique can be mastered on a realistic model before actually administering to patients. The students can palpate the arm and hand, which are made of supple, resilient plastic with a human feel. The vein is located, the needle introduced, and blood is withdrawn or fluid injected. The model can be used repeatedly. Complete with blood powder and carrying tray.

Dimensions: 46 x 15 x 13 cm.

Sh. wt. 1.81 kgs.

- Replacement Skin 0421283
- Replacement Vein 0421284

## MIS-45 IV Training Hand

Complete with blood powder and carrying tray.

Dimensions: 46 x 15 x 13 cm.

Sh. wt. 1.36 kgs.

- Replacement Skin 0421282
- Replacement Vein 0421284

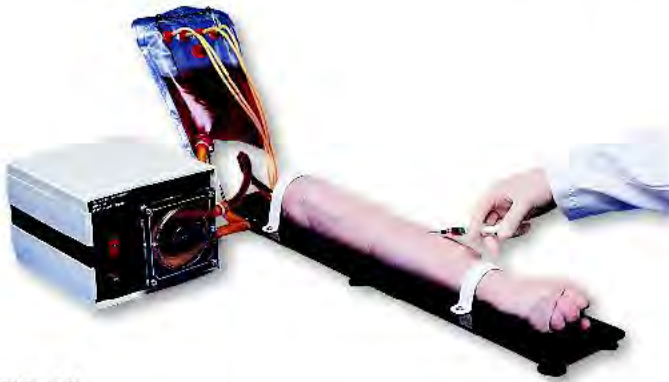
## BIS-35 IV Training Arm and Hand Set

Complete with blood powder and carrying trays.

Dimensions: 48 x 31 x 15 cm.

Sh. wt. 3.62 kgs.

# INJECTION



## **BPA-50** **Arterial/Venous Training Arm**

The only Arterial/Venous Training Arm that provides both venous and arterial vascular access. An arterial pulse is generated at the radial and brachial locations through a peristaltic pump, providing truly realistic arterial stick and AV anastomosis/hemodialysis exercises.

### Features include:

- Pulsatile arterial blood flow
  - Arterial stick exercises
  - AV anastomosis/hemodialysis
  - Standard intravenous, infusion, and blood collection techniques
  - Intramuscular injection site in the deltoid area
  - Two subcutaneous injection sites
  - Simulation of arterial collection for monitoring blood gases
  - Pad for incisions and suturing exercises
  - Administration of medication by intravenous bolus
  - Simulated radial and brachial arteries
  - Simulation of collapsed veins
  - Mini skin/tissue suture kit
  - Set-up kit with simulated blood concentrate, pressure bulb, blood dispensing bag, spare arm skin, funnel, and measuring spoon
  - Smoked lucite base with stand
  - Soft nylon carrying bag
  - Instruction manual
- Sh. Wt. 8.34 kgs.



## **IIC-60** **Buttock Mate**

Practice injections on a live "patient". Ideal for students to wear in order to understand the anxiety of real patients. Surface is very similar to a real body - leaves no needle marks! Simulated injection liquid can be injected into it. Features "sensitive point" for correct injection area. Light and compact injection simulator. Model has drain tube, drain bag, and belt to secure and position simulator on patient.

Dimensions: 14 x 34 x 50 cm.

Sh. wt. 1.99 kgs.



## **SII-20** **Intramuscular Injection Simulator**

Here is the perfect volunteer for training your beginning health care students to administer intramuscular injections. Always available for class demonstrations or practice by groups of 1 to 30, the Intramuscular Injection Simulator offers both visual and tactile learning. A simulated bony structure is embedded in the torso and represents the superior end of the femur, or greater trochanter, the posterior superior and anterior superior iliac spines, and the sacrum. The bony structure provides palpable anatomical landmarks so students can identify proper injection sites. A section of the upper, outer quadrant of the left gluteal area is cut away to allow students to visualize the underlying structures. The gluteus medius and gluteus maximus muscles, sciatic nerve, and vascular structures are clearly shown. Three types of intramuscular injections can be taught and practiced on this simulator: dorsogluteal, ventrogluteal, and vastus lateralis injections. As with all replicas and simulators, the Intramuscular Injection Simulator is extremely realistic. Skin and muscle textures, as well as bone shape and position, closely resemble a live patient. As a result, perforation of the tissue with a needle duplicates the sensation of administering an actual injection. The Intramuscular Injection Simulator comes complete with teaching guide, supply of syringes, and hard carrying case.

Dimensions: 56 x 41 x 25 cm.

Sh. wt. 8.16 kgs.



## **IIC-90** **Intramuscular Injection Model**

This high-tech medical model with realistic skin is perfect for teaching proper injection techniques and how to avoid nerves and veins. The see-through right side of the model shows internal structure including bones, muscles, nerves and veins. Correct intramuscular injection sites can be palpated. A green light indicates correct injection technique and positioning - a buzzer and flashing red light warn students if they have gone too deep or needle position is incorrect.

Dimensions: 38 x 35 x 22 cm.

Sh. wt. 7 kgs.



# INJECTION



## SII-25 Intradermal Injection Simulator

Now your students can practice intradermal injections safely and conveniently with the Intradermal Injection Simulator. The unit consists of a casting molded from a real forearm from the wrist to just below the elbow. The skin provides realistic feel and appearance to ensure a realistic training experience. The arm features eight sites for practicing intracutaneous injections. If fluid is properly injected, a characteristic skin welt will form. The welt is removed by withdrawing the fluid after practice. Each site is reusable by dozens of students. The Intradermal Injection Simulator includes arm section with eight injection sites, sealant, syringe, teaching guide, and storage box.

Dimensions: 33 x 28 x 13 cm.

Sh. wt. 0.91kgs.

## BEI-49 Adult Venipuncture and Injection Training Arm

Simple and easy to use, Venipuncture and Injection Training Arms are the ideal way to teach venipuncture and injection techniques including starting IVs and introducing Over the Needle IV catheters. These simulators end your problem of finding willing volunteers, and help avoid patient injury and liability while the students are learning new procedures. Realism begins with fine detail - right down to the fingerprints. But most important is the realistic feeling of puncture through the vinyl skin and latex veins. The skin actually rolls as you palpate the vein and the characteristic "pop" can be felt as the needle penetrates the vein. Veins are accessible at the antecubital fossa, along the forearm, and at the back of the hand, making it possible to practice venipuncture at any of the common sites. Practice of intramuscular injection is equally realistic. A foam pad simulates muscle tissue, and the boundaries are identified by natural bonelike landmarks.

Maintenance: All Venipuncture and Injection Arms are designed with replaceable skins and veins. Complete replacement skin kits are available and easy to use.

Includes an Arm with white skin, blood donor set, infusion set, 3 cc syringe, 12 cc syringe, needle, 1 pint of Blood, teaching guide, and hard carrying case.

Dimensions: 89 x 30 x 15 cm.

Sh. wt. 9.98 kgs.

### Replacement Parts:

- |                                 |         |
|---------------------------------|---------|
| • Skin and Vein Replacement Kit | 0421091 |
| • Vein Replacement Only         | 0421087 |
| • Blood (1.20 L.)               | 0421024 |
| • Blood (5.00 L.)               | 0421028 |
| • Fluid Supply Stand            | 0421132 |
| • Fluid Supply Bag              | 0421048 |
| • Ren Cleaner                   | 0421003 |



## BPH-41 Hemodialysis Practice Arm

The Hemodialysis Practice Arm features the realistic appearance and performance necessary to provide ideal practice for trainees or patients. This valuable training aid is easy to set up and use to demonstrate preparing the patient's arm for hemodialysis. An established fistula is accessible and the system can be pressurized with artificial blood so that there is an actual flashback when a needle is introduced. The artificial blood approximates the pale shades usually common in dialysis patients. Easily maintained, this simulator is designed with replaceable skin and vascular system. Complete with one pint of venous blood, 1 pint of arterial blood, tubing sealant, two fluid supply bags, instruction booklet, and carrying case.

Sh. wt. 7.26 kgs.

- |                                                         |         |
|---------------------------------------------------------|---------|
| • Hemodialysis Practice Arm Skin & Vein Replacement Kit | 0421257 |
| • Hemodialysis Practice Arm Vein Replacement Kit        | 0421542 |
| • Hemodialysis Arterial Blood (1,20L.)                  | 0421258 |
| • Hemodialysis Venous Blood (5.00 L.)                   | 0421024 |



## BSP-33 Arterial Puncture Arm

The Arterial Puncture Arm features the realism of appearance and performance necessary to provide realistic practice for trainees. Easy to set up and use, this valuable training aid is ideal for practice and demonstration in drawing arterial blood samples for monitoring blood gases. With this unique arm, students can actually identify puncture locations through palpation of the pulse at either the radial or brachial sites. Realistic arterial pressure produces a lifelike backflow of blood in the syringe, confirming proper needle location in the artery. Arterial Puncture Arm includes: two 3 cc syringes with needles, fluid supply bag, two replacement sections of artery, 1 pint Arterial Blood, teaching guide, and hard carrying case.

Dimensions: 71 x 33 x 13 cm.

Sh. wt. 8.34 kgs.

- |                                                 |         |
|-------------------------------------------------|---------|
| • Skin Replacement Kit with 3 Artery Sections   | 0421041 |
| • Arterial Puncture Arm Artery Replacement Only | 0421042 |
| • REN Cleaner                                   | 0421003 |
| • Arterial Blood                                | 0421043 |

# INJECTION

## Pediatric Head

- Invaluable tool for demonstrating and practicing infusions and venipuncture in the temporal and jugular veins of a newborn to 12-month-old infant
- Functional head is realistically modeled to represent a 6-month-old infant

The temporal vein of the Pediatric Head is easily accessible for IV infusions. Practice in the jugular vein is equally realistic. The neck is made of soft, flexible foam to provide a realistic feel of palpation and puncture.

## CPI-05

### Pediatric Head

Includes a Head with skin and veins, fluid supply bag, two different gauge winged infusion needles, 1 pint of blood, teaching guide, and hard carrying case.

Dimensions: 48 x 25 x 13 cm.

Sh. wt. 5.00 kgs.

#### Available Supplies

- Replacement Skin and Vein Kit. 0421034
- Vein Replacement Only. 0421035



## EII-25

### Intraosseous Infusion Simulator

The Intraosseous Infusion Simulator is a dramatic and exciting training aid designed to demonstrate and simulate the intraosseous infusion procedure. Students will be able to learn and practice, with incredible accuracy and realism, a procedure which has been difficult to simulate in the past. Prior to the Intraosseous Infusion Simulator, educators resorted to unsanitary chicken and turkey bones. PALS programs will find this teaching aid a convenient and sanitary alternative. This simulator is also very cost-effective due to replacement bones and skins which extend the life of the simulator indefinitely. Use a 15-gauge needle during simulation.

The bones used in the model have been designed with four sides, each side having the ability to be punctured several times. In addition, three palpable landmarks, including patella, tibia, and tibial tuberosity are located in both legs. Both legs have also been designed so that aspiration is possible. The Intraosseous Infusion Simulator represents a six-month-old infant. Included with the simulator are 10 replaceable bone inserts, 2 sets of replacement leg skins, two white towelettes, syringe with tubing, blood powder, sealing wax, 14 gr. liquid lubricant, mixing bottle, needle, and hard carrying case.

Dimensions: 41 x 38 x 15 cm.

Sh. wt. 5.00 kgs.

#### Palpable Landmarks

- Bone Replacement Kit. 0421006
- Skin Replacement Kit. 0421007
- Simulated Blood Mixture. 0421008
- REN Cleaner. Use to remove stubborn stains from simulators. 0421003
- I.O. Fluid System. 0421088
- Intraosseous Infusion Needle. 15 gauge. 0421082



**Avda. Sistema Solar, 13 – Nave 11  
28830 San Fernando de Henares  
Madrid**

**Telf. +34 918 328 318  
Telf. móvil: +34 657 783 403**

**email: [info@simulacionessanitarias.com](mailto:info@simulacionessanitarias.com)  
<http://www.simulacionessanitarias.com>**