



# RediStik<sup>®</sup>

*Wearable*  
**PIV Trainer Kit**

*A collaboration between:*



and



**Texas Children's  
Hospital<sup>®</sup>**

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Visit [sawbones.com](http://sawbones.com) for more information, including set-up videos and skills overview.

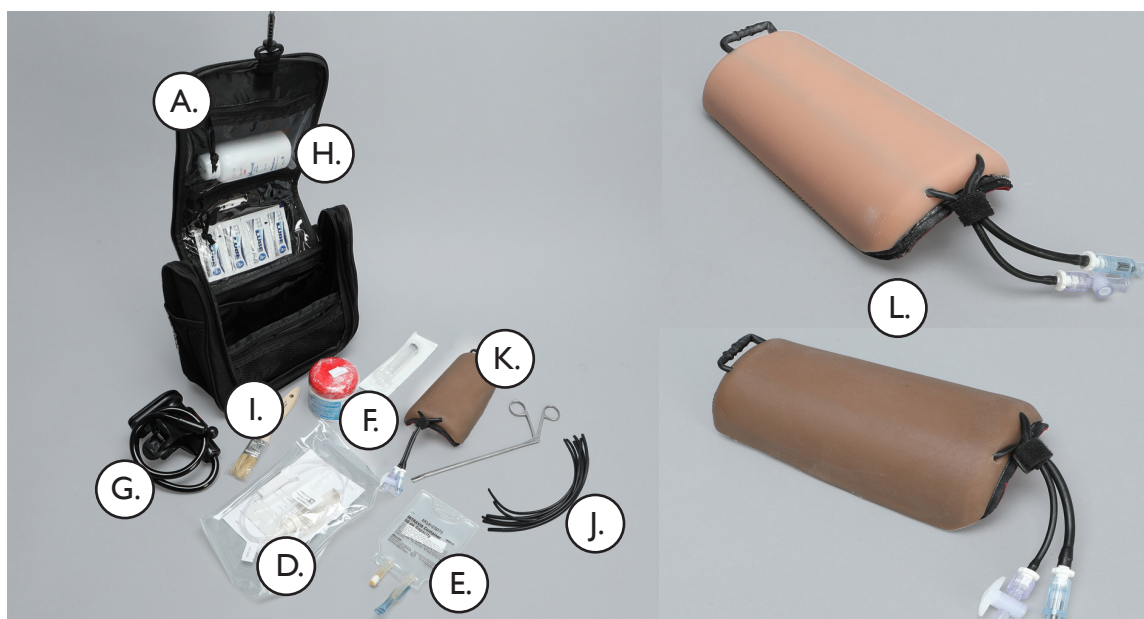
## I. ABOUT THE RediStik® WEARABLE PIV TRAINER

### THIS TRAINER FEATURES:

- Self-sealing textured skin and subcutaneous tissue provide the ability to practice:
  - Skin preparation techniques with alcohol or CHG application.
  - Visualization, palpation, and puncture of the vein with blood flash confirmation.
  - Threading of the catheter into the intravascular space.
  - Drawing back blood and administering saline flush.
  - Dressing placement.
- Lightweight and contoured design allows for quick securement to a person's or mannequin's arm.
- Versatile model allows for either tabletop or wearable simulation options.
- Needle-proof backing prevents accidental needle sticks.
- One small and one large vein option accommodates 18 GA to 24 GA needles.
- Clinical testing demonstrated life expectancy averages 1,000+ punctures with 24 GA needles.

## 2. PARTS OVERVIEW

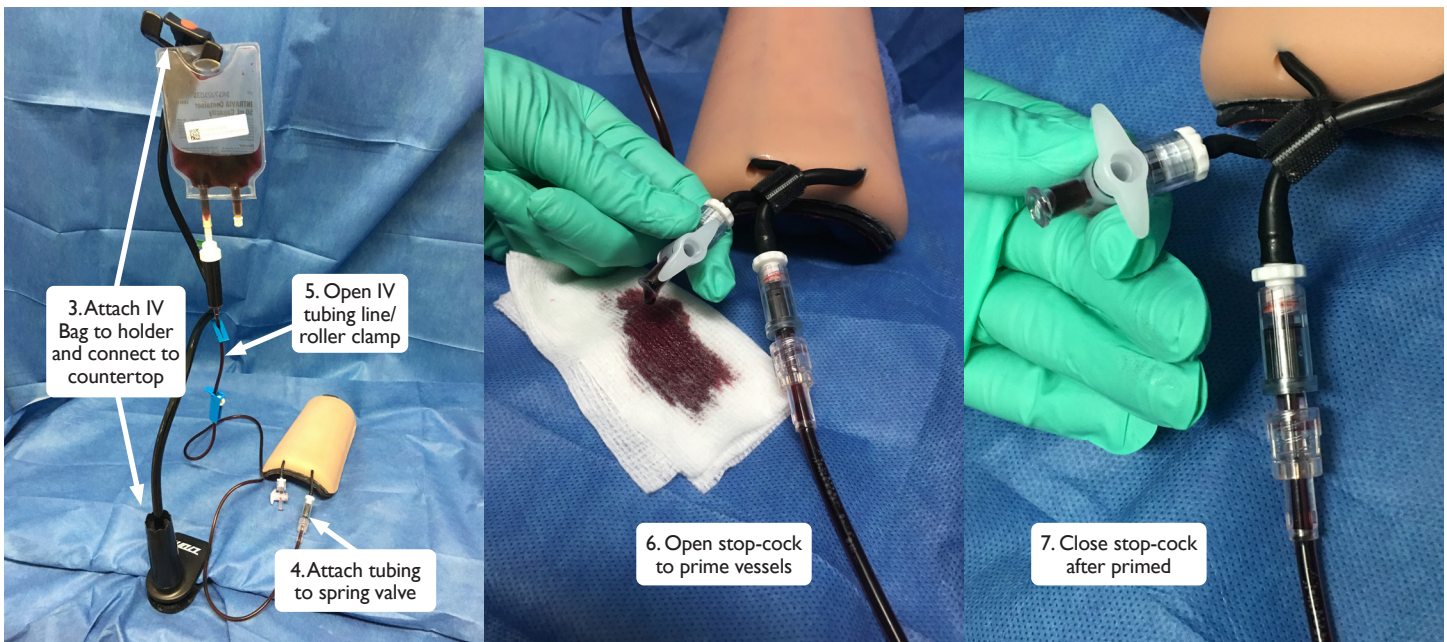
- A. Zippered storage bag for the kit
- B. Instructions (not depicted in picture)
- C. Bubble wrap protectant sleeve (blue) for the trainer (not depicted in picture)
- D. 50cc IV bag (empty)
- E. IV tubing- 40" universal secondary set
- F. Simulation blood (Color tabs)
- G. IV bag holder (adjustable tabletop attachment)
- H. Baby powder
- I. Brush
- J. Replacement vessel kit: (3 extra sets of black latex vessels, alligator forceps, 4 packets of lubrication jelly and 10cc syringe)
- K. RediStik® Wearable PIV Trainer
- L. Light and dark skin tone options



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### 3. TRAINER SET-UP

1. Create simulation blood (small or large tabs are provided in the kit):
  - a. Small tabs: mix 50 ml water + 12 red tabs + 7 yellow tabs + 1 blue tab
  - b. Large tabs: mix 50 cc water + 3 red tab + 1/8th blue tab
2. Fill IV bag with simulation blood by:
  - a. Fill via injection port the IV tubing connects to:
    - i. Disconnect IV tubing
    - ii. Push blood into bag via open port
    - iii. Repeat as needed
    - iv. Replace IV tubing
3. Attach IV bag to holder and connect to flat surface.
4. Attach tubing to trainer spring valve
5. Open IV tubing line and roller clamp
6. Open stop-cock to prime vessels
7. Close stop-cock and ensure velcro is wrapped tight around both vessels and pushed close to the trainer



#### For trainer to function properly and achieve adequate blood flash, please ensure:

- Blood is dark
- Veins are primed
- IV bag is at least 12 inches above arm
- IV tubing is unclamped
- Ensure velcro is wrapped tight around both vessels and pushed close to the trainer

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## 4. TROUBLESHOOTING – NO BLOOD FLASH OR FLOW WITH OPENED STOP-COCK

- Refer to trainer setup instructions. If the trainer is primed correctly and the IV tubing is open, you will get a flash as the needle enters the intravascular space. If there are any concerns about not getting appropriate blood flash in the needle, open stop-cock to confirm blood flow.
- After confirming all priming steps have been done and there is no flow when opening stop cock, connect 10 cc syringe to spring valve and flush out possible debris that could occlude the vein.
- You may get a vein popping feel but no blood flash. In this instance, you are likely hitting the side of the vein with the needle tip but not entering the intravascular space or you have gone all the way through the vein.
- Pull needle back, line up catheter, adjust the angle of approach, and try again.

## 5. CARE AND USE RECOMMENDATIONS

### VEIN CHARACTERISTICS AND TIPS

- Recommend **22-24 GA (at least ¾"-1" long needle)** and evenly distribute areas of puncturing to extend life of the trainer.  
**May use 18 GA in large vein.**
- Both vessels are deeper than they appear.
- Recommend to start on larger vein and progress to smaller/rolling vein as the trainee gains confidence.
- Instructor can fold IV tubing in half to temporarily stop blood flowing out of catheter that has been successfully placed in the vein.
- Vessel provides real-life resistance as you stick the vein and a popping sensation upon entering the vessel lumen. A flash of blood will confirm entry into intravascular space. The small vein mimics a person with rolling veins (vein may move away as you advance the needle).
  - Practice skin traction to stabilize a rolling vein.
  - Practice two-step approach: puncture skin first, then quickly advance needle into intravascular space.
- Veins illuminate with vein finder technology

### CARE RECOMMENDATION

- Skin care recommendations: Applying skin-prepping agents such as alcohol or CHG is appropriate. Wash skin/mesh securement with tap water and dry with a paper towel. To bring skin back to original feel, apply baby powder with brush after cleaning, or if skin feels tacky.
- May apply dressing. Dressing will stick better if baby powder is applied before starting the simulation and also tends to stick better if apply alcohol or CHG on skin prior to dressing application.
- To protect the trainer, store in the blue bubble wrap envelope and then place inside carrying bag. Avoid heavy or pointed objects pressing on trainer in storage.
- For prolonged periods of storage, drain simulation blood out of vessels into IV bag by opening stop cock and placing IV bag below trainer.
- Recommend occasionally flush out veins with water before or after use to remove possible debris that may clog veins/connections.
- May use a tourniquet on the trainer.

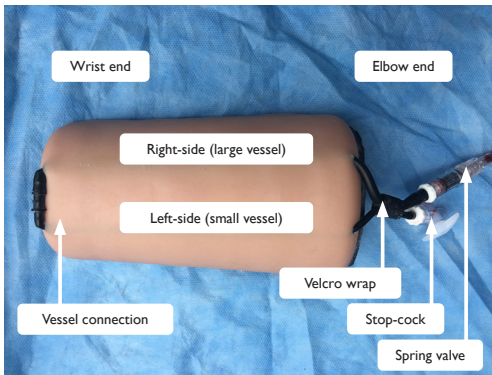
## VEIN REPLACEMENT:

3 replacement veins included in the kit

Reusable parts: Velcro wrap, spring valve, stop-cock, vessel connector

Parts in kit to change vessels: Reusable 10cc syringe, reusable alligator forceps, lubricating jelly packets

## VESSEL REPLACEMENT STEPS:



### How to change vessels

1. Disconnect both veins from the Velcro, vessel connector, stop-cock and spring valve (save connectors and Velcro)
2. Pull out used veins
3. Flush water through both vessel openings using a syringe.
4. **Ensure the vessel openings are well lubricated prior to pulling new veins through the openings.** Place jelly packet in 10cc syringe by pulling out plunger, squeeze in jelly and replace plunger in syringe. Place lubricating jelly into both vessel openings.
5. Guide alligator forceps through vessel opening (enter elbow side with alligator forceps, exit wrist side)



6. Grasp new vein (wrist side) with alligator forceps
7. Stabilize trainer and pull vein through the opening. The large vein is a tighter fit than the small vein. It is helpful to have someone hold the trainer while you pull the vessel through with the alligator forceps while using your other hand to help guide the vein from the opposite side.
8. After both veins are replaced, connect veins at wrist end with “reusable” vessel connector
9. Connect “reusable” stop-cock to small vein and “reusable” spring valve to large vein.
10. Wrap “reusable” Velcro tight around both veins and slide close to trainer.

## 6. CONTACT AND REORDER

**Contact:** [texaschildrens.org/redistik](https://texaschildrens.org/redistik)

**Reorder:** visit [sawbones.com](https://sawbones.com)

**Sawbones Customer Service USA** (servicing North America, South America, Asia and Australia):

(206) 463-5551 / [info@sawbones.com](mailto:info@sawbones.com), 6 am – 5 pm, PT

**Sawbones Customer Service EMEA** (servicing Europe, Middle East and Africa):

+46 40 650 7000 / [info@sawbones.se](mailto:info@sawbones.se), 8 am – 5 pm, CET

- **Light tone PIV trainer:** Part Number 1703-459
- **Dark tone PIV trainer:** Part Number 1703-459-10

For Texas Children's orders, please order via PeopleSoft and references:

- **Light tone PIV Trainer Kit:** Item # 0133531
- **Dark tone PIV Trainer Kit:** Item # 0133533



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