

**BEEBE HEALTHCARE**  
**MARGARET H. ROLLINS SCHOOL OF NURSING**  
**Nursing 201 – Nursing Care of Special Populations**  
**Venipuncture IV Insertion Procedure 2024**

1. Check physician's order sheet.
2. Assemble all equipment and take to patient's room. <ul style="list-style-type: none"> <li>• IV solution with tubing - if needed</li> <li>• Extension set (for all IV starts)</li> <li>• Pre-filled N.S. syringe</li> <li>• Alcohol swab</li> <li>• IV catheter (Jelco, Angiocath or Intracath)- appropriate gauge for length of therapy and patient age</li> <li>• IV start kit</li> </ul>
3. Properly identify the patient. (Allergies/Mastectomy)
4. Explain IV procedure age appropriately to patient.
5. Wash hands.
6. Place bath towel under arm. (optional)
7. Open IV start kit.
8. Prepare strips of tape (4-5") each (optional) and IV securing device materials and place within reach.
9. Attach N.S. syringe to extension set and prime with N.S. Remove cap at other end. Place within reach inside of sterile container (unless drawing labs with IV start- do not flush extension set).
10. Put gloves on.
11. Apply tourniquet (check radial pulse). <ul style="list-style-type: none"> <li>a. State method of tourniquet application in geriatric population to avoid skin pinching and tearing.</li> <li>b. May apply over gown or washcloth (protective device).</li> </ul>
12. State proper methods to bring vein to surface. <ul style="list-style-type: none"> <li>a. Patient makes a tight fist.</li> <li>b. Dangle arm over side of bed.</li> <li>c. Light tapping over vein.</li> <li>d. Gentle stroking in opposite flow of vein.</li> <li>e. Apply warm soaks to entire extremity.</li> </ul>
13. Locate best vein.
14. Select IV catheter.

<p>15. Cleanse skin per institution policy. At Beebe Healthcare: Chlorhexidine (Chloraprep) - using back and forth friction motion. Allow to dry.</p>
<p>16. Stabilize the chosen vein.</p>
<p>17. Hold IV catheter by the ribbed housing with thumb and finger(s) on opposite sides. Assure bevel and push-off tabs are in the up position. Hold the needle at a 10 - 15° angle &amp; sharply pierce the skin slightly to one side or over the chosen vein.</p>
<p>18. After piercing the skin, lower the angle of the needle almost parallel to the skin; move needle tip into vein.</p>
<p>19. A flashback of blood in the chamber will confirm vein entry. Ensure the entire chamber is filling with blood prior to catheter advancement. <u>Two-handed Technique:</u> Hold the device stable with one hand and place the thumb of the other hand behind the primary push-off tab. *PUSH the catheter to the insertion site. With your thumb stabilizing the device at the push-off tab, retract (PULL) the ribbed needle housing with the other handle until you hear a CLICK- the needle is locked. <u>One-handed Technique:</u> Hold the device stable with thumb and middle finger. Place index finger behind the primary push-off tab. *PUSH the catheter to the insertion site. With your index finger stabilizing the device at the push-off tab, retract (PULL) the ribbed needle housing with thumb and middle finger until you hear a CLICK- the needle is locked. * As you thread the catheter, the needle guard begins to cover the needle. DO NOT REINSERT NEEDLE INTO CATHETER AT ANY TIME this may cause shear.*</p>
<p>20. Remove the tourniquet.</p>
<p>21. Place gauze pad under IV catheter. Reach for primed extension set with dominant hand. Using non-dominant hand, apply digital pressure with little finger to the vein just above the tip of the catheter. Hold the hub securely with index finger and thumb of non-dominant hand (when holding hub, exert pressure towards the patient). Using the dominant hand, remove the needle guard by turning ¼ of the way to the left, pulling it out of hub, and remove.</p>

22. Quickly attach extension set by pushing the device into the hub, then screwing on the cap stabilizer. Never let go of the IV catheter until secured properly.
23. Slowly aspirate NSS syringe, checking for blood return, and then slowly inject 3ml N.S. Close clamp as you are injecting final 1 ml.
24. Apply skin prep around insertion site and allow it to dry. Apply IV securing device according to instructions.
25. Label with date, time, IV catheter size, and initials.
26. Use armboard, if indicated.
27. Instruct patient about movement with IV therapy and complications to report.
28. Chart on: EMR.