PICC, TUNNELED AND NON-TUNNELED CATHETERS ACCESS (S03)

FR/EMR	EMT	PARAMEDIC

Do Not Use Hemodialysis Shunts (grafts, fistulas)

Peripherally Inserted Central Catheter (PICC), tunneled (Broviac, Hickman, Groshong), and non-tunneled (subclavian, jugular) catheters, collectively known as pre-existing intravenous access, may be used if the patient is in extremis. A pre-existing intravenous access should only be used in patients requiring fluid therapy or IV medications. Inspect skin around PICC prior to access. If skin is red and/or tender, alternative vascular or intraosseous access must be used.

Pre-existing intravenous access catheters come in single, double and multi-lumen models; examine the port(s) to determine the gauge of the port and/or the location (proximal, medial and distal). The largest gauge or most distal port is preferred. If the preferred port is not patent, try the remaining port(s) to determine if they are patent.

Accessing the pre-existing intravenous access line requires a few pieces of equipment. Use at least a 10 mL syringe. 20 mL or larger is preferable. The larger the syringe, the less back pressure is applied to the catheter, thus preventing collapse if you inadvertently aspirate too quickly.

Following are steps required to access a pre-existing intravenous access line:

- Wash your hands and apply non-sterile gloves.
- Using three alcohol or povidone-iodine swabs, cleanse the end of the catheter and allow to dry.
- If the cap is needleless, attach the syringe to the cap. If it is not, remove the cap and, without touching the end of the catheter to any surface, quickly attach the syringe.
- Unlock the clamp prior to aspirating.
- Using gentle, even back pressure; withdraw a minimum of 10 mL of blood from the catheter. This will help aspirate any small clots that may have formed at the distal tip of the catheter. Also, if the catheter was flushed with any medications, such as heparin, this step helps to prevent bolusing the patient with the medication.
- Close all clamps between steps. (You cannot be sure that the catheter has an anti-reflux valve in the line).
- After aspiration, flush the catheter gently with 10 mL of sterile normal saline. If you encounter any difficulties aspirating or flushing, inspect the catheter for kinks. You might ask the patient to cough, take a deep breath, shrug his shoulders or turn his head to one side or the other. If you still encounter difficulty aspirating or flushing after using these techniques, do not to use this lumen of the catheter.
- If the line is patent, attach the IV line, unlock the clamp and begin infusing at the prescribed rate of flow.