What is a peripherally inserted central venous catheter (PICC) line? The PICC line is a thin tube that is inserted into a vein in order to give medicine and fluids directly into the infant’s bloodstream. It is used if your baby needs to be given medicine, blood or fluids many times over several days, weeks or months. Many infants are given an umbilical catheter for this purpose during the first several days after birth. But the risk for infection and blood clots is increased with long-term umbilical catheter use, so a PICC line is often used if your baby still needs medicines and fluids after the first several days following birth. A PICC line also may be used to give liquid nutrients (called parenteral nutrition) if your baby cannot yet have food by mouth.

Other reasons for using a PICC line include:

- Better delivery — medicines and nutrients are often more effective and have a quicker action when they can reach the baby’s bloodstream directly, rather than going through the mouth, stomach, and digestion process. In cases in which a baby cannot have anything by mouth, going right to the bloodstream is the only option. Many premature babies do not yet have mature digestive organs and therefore cannot yet take fluids or medicines by mouth.
- Protection — using a PICC line helps to protect the baby’s stomach and digestive organs from injury due to long-term use of certain medicines.
- Pain control — using a PICC line helps minimize needle sticks for the baby. This can help prevent premature babies from becoming over-sensitized to pain.

How is the PICC line placed? In most cases, the baby is placed on a warmer bed and given medicine to decrease any discomfort from the procedure. The baby’s skin is cleansed to reduce the risk of infection. A doctor or nurse then inserts the soft, thin PICC line through a vein in the baby’s arm or leg (see picture) to reach the large central blood vessels of the body. In some cases, the tube may be inserted through a vein in the scalp or in the neck. The tip of the tube rests near the entrance to the large veins that lead to the heart. The tube is then secured with stitches or tape to help prevent it from slipping out of place.

Are there any risks with a PICC line? Yes. As with any medical process, problems can arise with a PICC line. In some cases, the tip of the line may move after it has been inserted. If the line does not adjust itself, the doctor or nurse may have to move the tip into the correct place, if possible.
A PICC line cannot be pushed in again if it works its way out of a vein, which happens in some babies no matter how well secured the line is. PICC lines also may break, leak, or become blocked and may need to be replaced.

Infection also can be a problem with PICC lines. The risk of infection increases the longer the line is in place.

**When can the PICC line be removed?** Your baby’s doctor or nurse will assess when the line can be removed. This usually occurs when the baby is able to have fluids and medicines through another route or when the baby no longer needs frequent doses of medicines or fluids.

**What can parents do?** Parents can play a key role by taking an active part in their baby’s care. For any baby in the neonatal intensive care unit (NICU), taking steps to help prevent infections is a vital role. This can help reduce the risk for infection of the PICC line. Also, simply being present to comfort your baby after the procedure is helpful. As an active partner in your baby’s care, talk to your baby’s doctors and nurses about your questions.