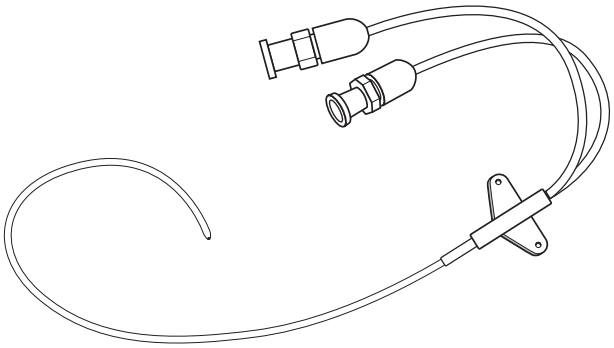
Let's Talk About...

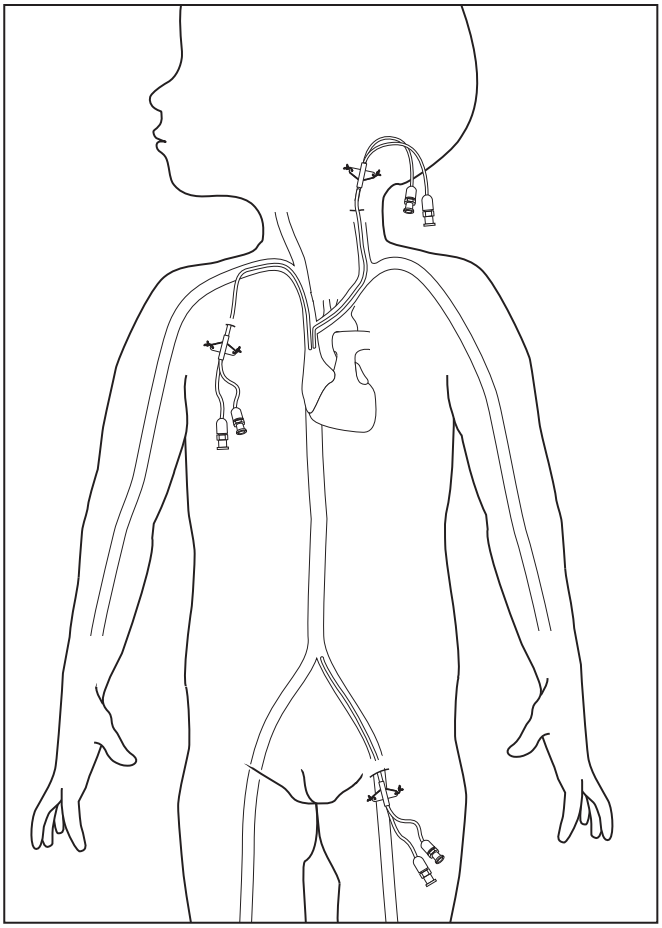
Central line care, percutaneous (PCVC)

A percutaneous (per-kyou-TAY-nee-us) central venous catheter (PCVC) is a tube placed inside a large vein. "Percutaneous" means the catheter is inserted through the skin. A PCVC is made of flexible plastic and is 2 to 8 inches long. It may have one to three outside openings ("lumens").



The catheter can be placed into one of the following veins (see illustration to the left):

- A vein in the neck
- A vein in the upper chest
- A vein in the groin



Why does my child need a PCVC?

A PCVC is for children who need IV medicines, frequent blood testing, IV nutrition, chemotherapy, or continuous monitoring of vital signs (for example blood pressure and heart rate). Children with PCVCs do not need to receive a needle every time they have these procedures. A PCVC can stay in place for up to one month.

How and where is a PCVC placed?

A doctor or specially trained nurse places a PCVC. Your child may receive a medicine to help her relax before the procedure.

To prevent infection, the line is placed in a sterile setting. This means the doctor or nurse will wear a gown, mask, and sterile gloves. Your child's skin will be cleaned with a sterilizing soap, and the area covered with a sterile cloth.

The PCVC is placed through the skin and then gently guided into the vein. A few stitches will be placed around the catheter to prevent it from accidentally moving or falling out.

After the procedure, your child may get an X-ray to make sure the catheter is in the right place.

Are there any possible complications?

The most common complications of central lines are infection, the catheter moving out of proper position, and catheter damage. Proper daily care can help to prevent these complications.

How will the staff care for the PCVC while my child is in the hospital?

The goals of the hospital staff are to prevent complications, especially infection and movement that moves the catheter out of proper position. While your child is in the hospital, the hospital staff will follow these special care procedures:

1. The staff will tape the catheter in at least two places outside the dressing (when possible), being careful not to pull on the catheter or tubing.
2. The staff will place a dressing over the site where the catheter enters your child's body. The dressing will help keep the site clean. The dressing will be sealed around the edges and kept clean and dry.
3. The hospital staff changes the dressing 24–48 hours after the PCVC is inserted, and then change it again according to hospital procedure and the type of dressing:
   - Transparent dressings (for example, Tegaderm™) are changed once a week
   - Gauze dressings are changed every 48 hours.
   - Specialty dressings (for example, Covaderm™) are changed twice a week.
   - Regardless of the type, dressings are changed when wet, loose, or soiled.
4. When the nurse changes the dressing, she checks for signs of infection. Some signs of infection are redness, swelling, and drainage.
5. If the catheter is not connected to an IV bag, the nurse flushes it with an anti-clotting medicine (Heparin®) at least twice a day to prevent clotting.
6. The cap on the catheter is changed at least once a week.

Central line infection prevention:

Occasionally a central line can become infected. The best way to prevent an infection is to take good care of the line. You can do these things to help:

1. Make sure the healthcare providers caring for your child wash their hands with soap and water or alcohol based hand sanitizer before and after caring for your child.
2. If the bandage comes off, or becomes wet or dirty, tell your healthcare provider immediately.
3. Don't let family or friends touch the port unless they put on a glove.
4. Make sure family and friends clean their hands with soap and water or alcohol based hand sanitizer before and after visiting.
5. Make sure healthcare providers scrub the cap (end of the line) with antiseptic before using the port.
6. Tell your healthcare provider immediately if the tubing becomes disconnected.
7. If you child wears diapers make sure the cap of the line does not get into the diaper.
8. Do not let the cap dangle in a bathtub.
9. In general keep the dressing clean and dry.
10. Keep the cap clean

Signs and symptoms of infection

Monitor the line for any signs or symptoms of infection. Tell your healthcare provider right away if you see any of these things:

- The skin where the line enters your child is red.
- The skin where the line enters is swollen.
- The skin where the line enters is warm to the touch.

- Your child has pain around where the line enters.
- Your child gets a fever greater than 101 and there is no other known reason for the fever.
- There is pus coming out of where the line enters your child.
- There is a foul odor coming from the site.

Important reference information

Use the following chart to record information about your child's home-care company, catheter, and access needle.

Home care company:	
Phone number:	
Catheter brand:	
Catheter size:	
Catheter length:	
Heparin flush concentration:	
Volume of flush:	
Frequency of flush:	
Type of dressing:	
Frequency of dressing change:	
What is used to clean the site:	

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Pediatric Education Services, 801.662.3500 | Rev. 10/11, LTA520440564 | *Available in Spanish*