Let's Talk About...

Central line care at home

Your child is going home with a central line. It is important to give her the right care at home to prevent problems. You may have to do one or more of the following:

- Change a cap or extension tubing on the central line
- Flush the line with Heparin flushes
- Draw blood from the central line
- Give your child medicines in the central line
- Change a dressing (not in this handout; your nurse will let you know if you need to do this and who will teach you)
- Prevent infection

Your child's nurse will teach you how to do these important procedures. This handout will help you remember the steps the nurse taught you.

How do I change a cap or extension tubing?

The end of the catheter is called a cap. This end is not a permanent part of the catheter. It may become brittle and break, so it is necessary to change it regularly.

How often should I change the cap?

Change the cap at least one time each week.

What items do I need?

- Exam gloves
- Alcohol wipes
- Cap or extension set (you may need both)
- 10 milliliter syringe
- Something to keep time that measures seconds, like a watch or clock.
- Heparin flush solution if your child's line is heparin locked or normal saline flush if your child's central line has IV fluids going in.

How is it done?

1. Wash your hands, turn off the IV fluid, and clamp the catheter.
2. Put on exam gloves.
3. Suck the proper flush solution into the syringe by pulling on the plunger. Attach the flush solution to a new cap or extension set. Push the flush solution plunger so that it fills the cap or extension set. Make sure there is no air in the new cap or extension set. Leave the syringe attached.
4. Remove the old cap or extension set.
5. Scrub the catheter hub vigorously with the alcohol pad for 15 seconds. Do not touch the hub with your gloved hands. Let the alcohol dry for at least 15 seconds.
6. Attach the new cap or extension set to the hub.
7. Unclamp the catheter. Gently pull back on the syringe to remove any air bubbles.
8. With the syringe tip down and the plunger end up, gently tap the syringe until any air rises to the plunger end.

9. Push in the remaining flush in the syringe. Do not inject any air into the central line.
10. If your child had IV fluid, start them again. If your child does not have IV fluids, clamp the catheter and remove the syringe.

How do I flush a central line with Heparin?

Heparin is a blood thinner. Injecting a little bit of heparin mixed with fluid will keep blood clots from forming around your child's central line.

How often should I heparin flush my child's central line?

Flush your child's central line every 12 hours, after drawing blood, and after giving medicine through the central line.

What items do I need?

- Alcohol wipes
- 10 milliliter syringe
- Heparin flush solution

How is it done?

1. Wash your hands.
2. Vigorously scrub the cap with an alcohol pad for 15 seconds.
3. Let the alcohol dry for 15 seconds. Don't touch the cap with your hands.
4. Attach the syringe to the cap and unclamp the catheter.
5. Instill heparin flush, as instructed by your home health company.
6. Clamp the catheter and remove the syringe.

How do I draw blood from a central line?

Your doctor may want you to take blood out of your child's central line for special tests.

What items do I need?

- Alcohol wipes
- Three 10 milliliter syringes
- Blood sample tubes
- Normal saline (NS)

How is it done?

1. Wash your hands. Turn off any IV fluids and clamp the line.
2. Vigorously scrub the catheter hub for 15 seconds with an alcohol prep pad. Do not touch the hub with your hands.
3. Draw normal saline fluid into the syringe. Attach the syringe with normal saline to the cap. Flush catheter with 3 to 5milliliters of normal saline.
4. Clamp catheter and remove the syringe. Keep this syringe sterile.
5. Attach an empty syringe to the cap. Unclamp the catheter. Gently pull back on the syringe plunger and remove 3 to 5 milliliters of blood. Discard the syringe in a sharps container or garbage can.
6. Attach another 10 milliliter syringe to the cap and withdraw the volume of blood needed for the lab test.
7. Remove the blood sample syringe, and attach the 10 milliliter heparin/normal saline syringe.
8. Instill 3 to 5 milliliters of normal saline and resume infusion, or flush with heparin (following the above description).

How do I give medicines through a central line?

Your doctor will order the medications that you should give your child.

What items do I need?

- Normal saline
- 10 milliliter syringe
- Medication syringe
- Alcohol swab

How is it done?

1. Wash your hands.
2. Fill a syringe with normal saline flush.
3. Turn off any IV fluids. Clamp the line.
4. Attach the syringe to the cap. Inject 3 to 5 milliliters of flush into the line.
5. Clamp catheter.
6. Attach the medication syringe or medication tubing to the cap.
7. Give the medication as directed by your pharmacist or home care nurse.
8. Clamp the catheter.
9. Instill 3 to 5 milliliters of normal saline.
10. If your child had IV fluid, start them again. If your child does not have IV fluids, clamp the catheter and remove the syringe.

How can I prevent a central line infection?

Occasionally a central line can become infected. The best way to prevent an infection is to take good care of the line. You can prevent infection by doing the following:

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

Signs and symptoms of infection

Monitor the line for any signs or symptoms of infection. You should check the dressing and skin around the central line every day. Call 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.
- Where the line enters the skin is painful.
- Your child has a fever greater than 101 and there is no other known reason for the fever.
- Where the line enters the skin has pus coming out.
- Where the line enters the skin smells bad.

When should I call a health care provider?

- The catheter will not flush.
- There is bleeding or leaking where the line enters the site or at a connection. (See ***Let's Talk About… Central line catheter emergencies***).

- You cannot draw blood from the line.
- Your child has signs and symptoms of infection (for example fever, redness at site, fussiness).
- The catheter is displaced or damaged.
- Your child has pain in her chest, ear, or neck when the IV fluids are running.

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