Central Line Care

Tunneled Central Line

In Partnership with Primary Children’s Hospital
One of the goals of Intermountain Healthcare is to ensure you feel comfortable caring for your child once you go home. Experts at Primary Children’s Hospital created the content of this booklet to ensure you have the best and most complete information.

Caring for your child now that she has a central line, will take time, practice, and patience. This booklet will help you feel comfortable in caring for and managing her central line at home. This booklet will explain the following:

- How the central line is placed
- How to change the dressing at home
- How to change a needleless connector
- How to flush a central line
- How to give medicine using a central line
- How to prevent a central line infection
- What to do in an emergency with a central line

As you begin to learn these new skills, please ask questions so you feel confident in caring for your child and her central line. Your child's healthcare team will be there to help you learn every step of the way.
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Introduction

Your child has received a central line. You may also hear it called a central venous catheter (CVC), catheter, or line. These all mean the same thing. A central line is a type of intravenous line (IV). An IV is a small tube placed in a vein to give a person fluids and medicines. Regular IVs are short and last for only a few days. Central lines are placed through the skin into a larger vein. Central lines are longer and can stay in place for weeks or months. This allows your child to receive IV fluids, nutrition, and medicine (for example, chemotherapy and antibiotics). A central line also may be used to collect blood for tests.

You may be concerned about how you will care for the central line at home and how you will learn all the skills you need. This is normal. The nurses will teach you about the central line. They will teach you how to flush the catheter, change the dressing, how to give medicine, and what to do in an emergency. When you perform these tasks properly, you will help prevent an infection in your child. It is best to start learning these skills while your child is in the hospital and get lots of practice before your child goes home.

You can take this booklet home and use it whenever you need it. It will help you remember how to do central line care once you leave the hospital. The information in this booklet is a general guide. If your child’s doctor recommends care that is different for your child, follow your doctor’s instructions instead of this booklet.

As you learn about central lines you will hear many new words. There is a guide where words are explained on the last page of this booklet. We encourage you to ask questions and practice skills so you feel comfortable with the central line when your child leaves the hospital.

Asking QUESTIONS along the way is the best way to learn.
What is a tunneled central line?

This booklet has information about a specific type of central line called a tunneled central line.

A tunneled central line is a type of central line that enters the skin, tunnels under the skin about 1 inch, and enters a vein under the collar bone. The catheter is long and the end (tip) reaches the large vein that enters the heart.
How is the tunneled central line placed?

The procedure for placing a tunneled central line is done in the operating room. Your child will receive anesthesia, the medicine that helps your child sleep during surgery. The doctor makes a small opening in the skin and then tunnels the central line under the skin. The central line is threaded into a vein until the tip is in one of the large veins near the heart.

What makes the tunneled central line different from other central lines?

There is a small bump on the central line about ½ inch long called a “cuff.” The cuff is placed under the skin to help prevent infection. The skin grows around the cuff. This helps keep the central line in place.

Tunneled central lines have one, two, or three openings (lumens). The lumens are where tubing and syringes can be attached so your child can receive medicine or have blood taken for tests.

What will the tunneled central line look like after surgery?

There is a special sterile dressing over the place where the central line comes out of the skin. The sterile dressing helps prevent infection and keeps the central line in place.

There may be a little bit of blood around the sterile dressing after surgery. This is normal. Your child’s nurse will clean this up the first time the dressing is changed.

There will also be a clamp on the central line. The clamp should always be closed when there is no fluid running through it.
A tunneled central line enters the skin, tunnels under the skin about 1 inch and then is threaded into a large vein near the heart.
Central line care at home

What will I have to do at home?
Once you arrive home you will need to continue to care for the central line. This may include changing the dressing, giving medicine, giving IV fluids, or IV nutrition. Much of this information is discussed later in this booklet. Your home care company or pharmacy will provide you with the supplies you will need. The first time the home care company visits you, talk with the nurse about the services they will provide.

Before your child goes home you may receive a central line “Go Bag” or emergency kit. Keep this kit with your child at all times for central line emergencies. It has a dressing change kit, an emergency clamp, two sterile gauze pads, and antibiotic ointment. There is an insert in this booklet that will help you know what to do if there is an emergency with the central line. Fill out the information on the sheet and place it inside your “Go Bag”.

If you don’t receive a "Go Bag" before you go home, you should make your own emergency kit. Gather supplies listed below and place them in a bag to carry with you.

Supplies in the “Go Bag” or emergency kit

- 4 x 4 Sterile gauze pad
- 3 x 3 Sterile gauze pad
- Dressing change kit
- Emergency clamp
- Antibiotic ointment

(see page 8 for photos of contents)
How do I change a central line dressing?

It takes training and practice to change a central line dressing. The best way to learn is to practice as much as you can while your child is in the hospital. The type of dressing your child has will determine how often it will need to be changed.

- Transparent (see-through) dressing: change every seven days.
- Gauze dressing: change every 48 hours.

If your child’s dressing is loose, wet, or soiled, change it right away. This will help prevent an infection.

Each home care company is different and the central line care at home may be a little different from the care your child received in the hospital. This is okay. The first time the home care company visits you, talk with the nurse about the services they will provide.

The home is different from the hospital. In the hospital the dressing is changed in a sterile way. At home it is changed in a clean way. Even if your home care company changes the central line dressing for you, you should know how to change the dressing in an emergency.

Your home care company or pharmacy will provide you with all the supplies you will need to care for your child’s central line at home. Some of the supplies may come in a kit. Some of the supplies may come as individual items. If your home care company does not provide a kit, all of the supplies will come as individual items. The brand and name of the kit and individual items may be different than what is pictured in this booklet. This is okay.
Supplies needed to change the dressing

Dressing change kit supplies

- Sterile gloves
- Face mask
- Gauze, two sizes
- Cotton tip applicator
- Skin protectant
- Dressing, Tegaderm™
- Change date label
- Hand sanitizer
- Alcohol swabstick
- Chlorhexidine (CHG) sponge
Supplies not in the dressing change kit

Steps for changing a central line dressing

**Before you start**
If your child is an infant or a toddler, have an extra person entertain your child and hold her hands so she does not touch the clean skin or sterile supplies.

1. Locate the dressing change kit.
2. Gather the following supplies.
   - dressing change kit
   - procedure gloves
   - sterile gloves – if not in the dressing kit

3. Wash or sanitize your hands.
4. Open the dressing change kit.
5. Put on the mask.
6. Put on procedure gloves.

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Remove the old dressing

1. Carefully remove the old central line dressing.
2. Look at where the central line enters the skin. Check for any signs of infection or irritation.
3. Take off your procedure gloves and wash or sanitize your hands again. If you use hand sanitizer you will not have to leave your child’s side.
4. Put on the sterile gloves from the kit. To keep your gloves as clean as possible, only touch the supplies needed to change the dressing.

Never use scissors to cut off the dressing. The central line can be cut easily.
Clean where the central line enters the skin

Clean the skin with alcohol if needed

If the skin or site where the central line enters your child’s skin is visibly dirty, clean with alcohol swabs first. If the skin looks clean, you just need to clean with chlorhexidine (CHG).

1 Take one alcohol swab at a time.

2 Place the swab where the central line enters the skin (insertion site) and move it outward on the skin in a circle. As you move out in a circle, twist the swab at the same time. Continue moving out in a circle until you have cleaned the whole area that will be covered by the dressing.

3 Do this with each of the three alcohol swabs, one by one.

Clean the skin with CHG*

1 Take the CHG sponge and squeeze the wings. This will break the liquid container and wet the sponge.

2 Press the sponge lightly over the central line insertion site until you see liquid on the skin.

3 Clean the skin around the central line with the CHG sponge for 30 seconds. Scrub gently in many different directions.

4 Clean the whole area that will be covered by the dressing.

5 Allow the area to dry all the way. This may take one to two minutes. This will keep the skin from getting irritated and allow the dressing to stick better.

6 After cleaning the skin with CHG, apply skin protectant if available (see next page.)

*If your child is allergic to CHG, use betadine instead (see next page).

Do not wipe away the CHG, blow on, or fan the site.
Apply skin protectant if available

1. Put the protectant on the skin in a picture frame shape where the dressing will be placed.
2. Leave a one inch space around the insertion site where you do not apply protectant.
3. Let the skin protectant dry all the way. This will keep the skin from getting irritated and allow the dressing to stick better.

Skin protectant is used as a shield to help protect the skin from breakdown when a dressing is in place for a long period of time.

Put skin protectant here.

Place the new dressing

1. Place a new sterile dressing on the skin. Make sure you can see the place where the central line enters the skin. Overlap the edges of the dressing under the central line.
2. Use one tape strip under the central line and lay it flat against the dressing.
3. Use the other tape strip over the central line and lay it down onto the dressing.
4. Write on the dressing the date and time you changed it.

*If your child is allergic to CHG, use Betadine® swabs instead

1. Take one Betadine® swab at a time. Start where the central line enters the skin and move it outward on the skin in a circle. As you move out in a circle, twist the swab at the same time.
2. Do this with each of the three Betadine® swabs one by one.
3. Place a sterile 4x4 gauze over the site for one minute.
4. Lift off the 4x4 gauze. Blot off any extra Betadine® with the 4x4 gauze. Apply skin protectant if available.
How do I change a needleless connector?

The needleless connector is a cap at the end of the central line. You may hear nurses call this the “cap” or “clave.” The needleless connector keeps blood inside the central line and helps prevent infection.

Steps for changing a needleless connector

**Before you start**

If your child is an infant or a toddler, have an extra person entertain your child and hold her hands so she doesn’t touch the needleless connector or supplies.

**Steps for changing the needleless connector**

1. **Put on clean procedure gloves.**
2. **Clamp the central line.**
3. **Attach a normal saline syringe to the new needleless connector.**
4. **Push the normal saline into the needleless connector until it is filled with fluid. Make sure there is no air in the needleless connector.**

**Before you start:**

- If your child is an infant or a toddler, have an extra person entertain your child and hold her hands so she doesn’t touch the needleless connector or supplies.
- Wash or sanitize your hands after you have the necessary supplies.
- Change your child’s needleless connector every 7 days.
5 Leave the syringe attached to the needleless connector and place it on a clean surface.

6 Remove the old needleless connector.

7 Scrub the end of the central line with an alcohol prep pad quickly in a back and forth motion for 15 seconds.

8 Let the alcohol dry for 15 seconds.

9 Remove the cap on the needleless connector.

10 Attach the new needleless connector to the central line.

11 Unclamp the central line.

12 Gently push the normal saline in the syringe into the central line.

13 Clamp the central line again and remove the normal saline syringe.

14 If your child has a heparin lock, flush the central line with heparin. For details see page 15.

15 Place a new disinfectant cap on the needleless connector if you have them. For details see page 19.

NOTE: If your child has IV fluids, hook up the tubing and start them again.

Do not touch, fan, or blow on the end of the central line. Do not let the end of the central line touch anything.
Tips to remember every time you use the central line

Once you arrive home you will need to continue to care for the central line. As you work with the central line take care not to pull on it. Whenever you need to use your child’s central line (for example, to start antibiotics or connect fluids) the following tips will help prevent a central line infection:

**REMEMBER**

After you have cleaned the needleless connector, do not let the end of the connector touch anything until you attach the tubing or syringe. If you accidently touch the end of the connector, clean it again.

1. Sanitize or wash your hands with soap and water.
2. If you have procedure gloves, use them.
3. Scrub the end of the needleless connector very quickly back and forth for 15 seconds with an alcohol pad.
4. Let the site dry for 15 seconds.

**Without a disinfectant cap**

**With a disinfectant cap**

3. Remove the disinfectant cap. The needless connector is ready for use if the cap has been in place for at least 5 minutes. No need to scrub with alcohol.

Special consideration: if your child is immunocompromised, do both.

Make sure you throw away the disinfectant cap. They are small and can be a choking hazard.
How do I flush a central line?

Heparin is a medicine that thins the blood. A small amount of heparin in the central line will keep it free from blood clots. This is called a “heparin lock.” It is important to keep the central line free of clots so it will work properly. Normal saline is also used to flush the central line before and after medicine is given through the central line. This will ensure the entire central line does not have medicine left in it before and after each use.

How often do I flush the central line?

- Every 12 hours when your child is not receiving medicines.
- If your child is receiving medicines you will be flushing the central line before and after each medicine.

Steps for flushing a central line

1. Before you start, gather the supplies you need:
   - 10 mL syringe with 3 mL of 10 unit/mL of heparin
   - Procedure gloves if you have them
   - Alcohol pad
   - Disinfectant cap

2. Wash or sanitize your hands after you have the necessary supplies.

Instructions continue on page 16.
Steps for flushing a central line (continued)

Flush the central line

1. Put on procedure gloves.

2a. If the central line has a disinfectant cap, remove it and throw it away.

Do not touch, fan, or blow on the end of the needleless connector. Do not let it touch anything.

2b. If the central line does not have a disinfectant cap, scrub the end of the needleless connector with an alcohol pad quickly in a back and forth motion for 15 seconds. Let the alcohol dry for 15 seconds.

3. Remove the cap on a heparin syringe. Make sure there are no air bubbles in the syringe.

4. Attach the heparin syringe to the needleless connector.

5. Unclamp the central line.

6. Gently push the heparin into the central line. If you notice air in the syringe stop before you push air into the line.

7. Clamp the central line.

8. Remove the syringe.

9. Place a new disinfectant cap on the needleless connector if you have them.
How do I give medicine through a central line?

Your child’s doctor may order medicines that will be given through the central line. The medicine pump you have at home may be different than the ones at the hospital. This is okay. Your home care company will teach you how to use your pump. The medicines you give at home may have a different concentration than at the hospital so the medicine may run faster or slower. Follow the instructions your home care nurse gives you.

Steps for giving medicine through a central line

1. Before you start, gather the supplies you need:

- 10 mL syringe with 3-5 mL of 10 unit/mL of heparin
- Normal saline syringe
- Disinfectant cap
- Alcohol pad
- Procedure gloves
- Medicine syringe

2. Wash or sanitize your hands after you have the necessary supplies.

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<td>0.9% Sodium Chloride</td>
<td>10 mL</td>
<td>Before and after medicine and IV fluids</td>
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<tr>
<td>(normal saline)</td>
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<tr>
<td>Heparin 10 units/mL</td>
<td>3-5 mL</td>
<td>After giving medicine and every 12 hours when the central line is not in use.</td>
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Instructions continue on page 18.
S.A.S.H.
An easy way to remember the steps for giving medicine: SASH

S  Saline
A  Antibiotic/medicine
S  Saline
H  Heparin

Steps for giving medicine through a central line (continued)

Prepare to give medicine:

1  Put on procedure gloves.
2a If the central line has a disinfectant cap, remove it and throw it away.
2b If the central line does not have a disinfectant cap, scrub the end of the needleless connector with an alcohol pad quickly in a back and forth motion for 15 seconds. Let dry for 15 seconds.
3  Remove the cap on a normal saline syringe and attach it to the needleless connector.
4  Unclamp the central line.

Check for blood return

1  Gently pull back on the syringe. You should get a small amount of blood into the syringe. If you can’t get blood return, contact your child’s doctor.
2  Gently push 10 mL of normal saline into the central line.
3  Clamp the central line again and remove the normal saline syringe.

Make sure you throw away the disinfectant cap. They are small and can be a choking hazard.
Give medicine

1. Remove any caps that may be on the syringe or tubing and attach the medicine syringe or medicine tubing to the needleless connector.
2. Unclamp the central line.
3. Give the medicine as directed by your pharmacist or home care nurse.
4. Once you have given the medicine, clamp the central line and remove the medicine syringe or medicine tubing.
5. Remove the cap on a normal saline syringe and attach it to the needleless connector.
6. Gently push 10 mL of normal saline into the central line.
7. After giving the normal saline, repeat steps 5 and 6 with 3-5 mL of 10 unit/mL heparin.
8. Place a new disinfectant cap on the needleless connector if you have them.

NOTE: If your child has IV fluids, hook up the tubing and start them again.

Disinfectant caps

Disinfectant caps are used at the ends of the needleless connector. These caps have a disinfectant (like alcohol) inside the cap to help keep the needleless connector clean and to help prevent infection. At the hospital, disinfectant caps are used on all central lines.

When your child is discharged, your home care company may provide these caps. However, not all companies have them or they may use a different brand. This is okay. If your home care company provides them, make sure your child has one in place whenever the line is not in use. If your home care company does not provide disinfectant caps, make sure you scrub the end of the needleless connector with an alcohol pad for 15 seconds and let it dry for 15 seconds every time you use the line.

The most common brands of disinfectant caps.

- DualCap®
- SwabCap®
- Curo®

Make sure you throw away the disinfectant cap. They are small and can be a choking hazard.
How do I prevent my child from getting a central line infection?

Central line infections can be very serious and can make your child very sick. This can sometimes lead to more time spent in the hospital, more antibiotics, removal of the central line, or in the most serious cases death. An infection can also cause a delay in treatment for your child’s illness. The best way to prevent a central line infection is to take good care of it.

Where should I do my child’s central line care?

- Whenever you do central line care (for example, give medicine or change the dressing) make sure the area where you work is clean. Do not do central line care in the bathroom because there are a lot of germs in the bathroom.
- If you are going to change the dressing, have your child lean back on a couch or in a chair. If you are going to give her medicine or flush the central line, she can choose what position is most comfortable. Place a clean towel under your child.
- A kitchen counter or table is a good place to put the supplies you will be using. Before you begin central line care, clean the area you will be working in. Use an all-purpose cleaner for hard surfaces. Place a clean towel on the surface after you have cleaned it. Gather all the supplies you need and place them on the clean towel. Make sure the supplies are in a location that is easy to reach while you are doing central line cares.

How can I prevent a central line infection?

- Make sure you, your child, your family, and visitors do one of the following:
  - Wash hands frequently with soap and water
  - Sanitize hands frequently with an alcohol-based hand sanitizer
- If the dressing comes off or becomes loose, wet, or soiled, change it right away.
- Do not let family or friends touch the central line unless they put on clean procedure gloves.
- If you use disinfectant caps on your child’s central line, make sure they are always in place. Once the disinfectant cap has been in place for more than 5 minutes, you will not need to scrub the needleless connector with alcohol before you use it. After the cap is removed, allow 15 seconds for needleless connector to dry before you attach anything. During this time make sure the end does not touch anything.
• If your child is immunocompromised, make sure you scrub the needleless connector for 15 seconds after you remove the disinfectant cap. For details, see page 14.

• If your child does not have a disinfectant cap on the needleless connector, you will need to scrub the needleless connector with an alcohol pad for 15 seconds and let it dry for 15 seconds before you use the central line.

• If the medicine tubing becomes disconnected, clean both the needleless connector and the end of the tubing with an alcohol pad for 15 seconds and let it dry for 15 seconds. Then reconnect the needleless connector to the tubing.

• If your child wears diapers, make sure the needleless connector does not get into the diaper area.

• Do your best to keep the dressing and central line dry. When you bathe your child, cover the dressing and the central line with plastic wrap and tape the edges to your child’s skin. For details, see page 24.

• Your child should not go swimming while she has a central line.

What should I look for to see if my child has a central line infection?

Infections can happen even if you do your best to keep the central line clean. While the central line is in place, look at it every day for signs of infection. Look at the skin or "site" where your child’s central line enters the body.

Signs of infection include the following:

• Redness around the site
• Swelling
• Warm to the touch
• Your child complains of pain
• Your child has a fever for no known reason
• Any drainage around the site

Check the following once a day.

• Check the skin around the dressing for signs of irritation.
• Make sure the dressing is clean, dry, and sealed to the skin.
  • Make sure there is a date written on the dressing so you know when to change it.
What do I do in an emergency?

When your child leaves the hospital you will need to make sure the central line is protected. Make sure you have the “Go Bag” or emergency kit with your child at all times. The “Go Bag” has supplies needed for an emergency.

What should I do if the central line gets a hole or breaks apart?

1. Kink the central line with your fingers anywhere between the hole and your child.
2. Quickly find the emergency clamp in your "Go Bag."
3. Clamp the central line between the hole and your child.
4. If the central line breaks apart, wrap sterile gauze from the "Go Bag" around the broken or damaged end of the central line. This keeps germs from getting inside the central line.
5. Call your child’s doctor and explain what happened. They will tell you what to do next.
6. Call your home care company and tell the nurse what happened.

What should I do if the central line comes out?

1. Press down on the place where the central line came out of your child’s skin. Use a sterile gauze pad, a clean towel, and your hand to hold firm pressure on this area for five minutes.
2. If the bleeding does not stop after five minutes:
   - Go to the Emergency Department or call 911.
   - Continue putting pressure on the site where the central line came out.
3. If the bleeding does stop after five minutes:
   - Open the dressing change kit from your “Go Bag” or emergency kit.
   - Clean the site with the CHG sponge.
   - Put a small amount of antibiotic ointment over the site.
   - Put a sterile dressing over the site and leave it in place until your child can see a doctor.
   - Call your child’s doctor.
What should I do if the central line will not flush?

1. Make sure the central line is not kinked or clamped. Open all clamps and untangle all kinks.

2. If you cannot see any kinks, take off the dressing and look for kinks or twists under the dressing. Untangle all kinks or twists.

3. Change the dressing.

4. Change the needleless connector.

5. If you have tried all the above and you still cannot withdraw fluid or flush the central line, call your child’s home care company.

Frequently Asked Questions:

How do I prevent an air bubble from getting into my child’s central line?

To decrease the risk of getting air into the central line, remove air in the saline or heparin syringes before flushing the central line. To get air bubbles out of the syringe, point the end you will attach to the needleless connector up. Tap the syringe with your finger to move the air bubble to the top of the syringe. Once all the air is at the top, slowly push the plunger up until all the air is gone and you have a little bit of liquid coming out the top of the syringe.

What do I do if the end of the central line touches something after I clean it?

Clean the end of the needleless connector again for 15 seconds with an alcohol pad and let it dry for 15 seconds. If the medicine tubing touches something after you take off the cap, clean the end with an alcohol pad for 15 seconds and let it dry for 15 seconds. If the disinfectant cap, normal saline or heparin syringe touches something, throw it away and get a new one.

Can my child go to school or out in the community with the central line?

Yes. Make sure no one touches the end of the central line. Do your best to keep the end tucked under clothes so it will not be pulled on. Make sure your child has her "Go Bag" in case the line breaks or the dressing becomes wet or dirty. Your child can be active but should not play contact sports such as football, soccer, or basketball. Avoid activities that may pull out the line.
Frequently Asked Questions (continued)

How do I bathe my child with a central line?
You will need to cover the dressing whenever your child bathes. Cover the entire dressing and the central line with plastic wrap and tape the edges to your child’s skin. Do your best to make sure the dressing stays dry. Do not let the dressing go all the way under the water. If the dressing does get wet, change the dressing. If the needleless connector gets wet or falls into the bath water, you will need to change the needleless connector.

How can I keep my child from pulling at the dressing?
Cover and protect the dressing and central line with as much clothing as possible.

Can my child go swimming with a central line?
No. You should not take your child swimming if she has a central line.

What should I do if my child has an allergy to CHG?
It is very rare for someone to have an allergy to CHG. Sometimes the skin can get red and itchy if the dressing is put on before the CHG is allowed to dry. It is best to have a doctor decide if your child has an allergy to CHG. Until you see your doctor again, use Betadine® to clean the central line. For details, see page 11.
Glossary

**alcohol pad or swab sticks**
A small square pad or application stick with alcohol used to clean and kill germs.

**Betadine®**
Brand name for iodine used to clean and kill germs on the skin.

**catheter**
A hollow tube inserted into the body.

**central line dressing**
A protective covering over a central line insertion site to prevent infection.

**central venous central line (CVC)**
An intravenous or IV catheter that is placed into a large vein that leads to the heart for the purpose of giving long term medicine, nutrition, and drawing blood.

**chlorhexidine (CHG)**
A cleaner used to kill germs and prevent them from growing on the skin.

**flush**
To wash out the central line with normal saline or heparin in order to clear the catheter of medicine or blood.

**gauze**
A thin piece of cotton with an open weave.

**heparin**
A medicine that thins the blood and is used to help prevent clotting inside the central line.

**insertion site**
The area where the central line enters the skin.

**intravenous (IV)**
A tiny flexible tube inserted into a vein to give medicine or fluid into the blood stream.

**lumen**
The opening of a tube or catheter.

**needleless connector**
A device placed at the end of the central line to keep germs from getting into the blood. It also keeps blood from coming out of the central line.

**normal saline**
A fluid used to flush or clear out medicine from a central line.

**parenteral nutrition (TPN)**
A special fluid mixture of nutrients given though an IV.

**procedure gloves**
Clean gloves.

**radiologist**
A doctor specially trained to read x-rays.

**sedation**
When a person receives medicine to help them relax, be calm, and sleepy.

**site**
See insertion site.

**sterile**
Free from germs.

**sterile gloves**
Gloves that are specially packaged to be completely free from germs.

**TPN**
See parenteral nutrition.

**tunneled central line**
A tube made of soft, flexible plastic. The doctor tunnels the central line under the skin and places it in one of the veins just under the collarbone. The central line is long and reaches the large vein that enters the heart.

**vein**
A blood vessel that returns blood to the heart.
## Special care for my child’s central line

### Contact information
- Home care company:
- Home care company phone number:
- Home care pharmacy:
- Home care pharmacy phone number:
- Other important phone numbers:

### Central line information
- Brand:
- French:
- Number of lumens:
- Dressing type:
- How often to change the dressing:
- Dressing change cleanser:

### Flushing information
- Concentration of heparin flush for routine flushing: 10 units/mL
- Amount of heparin flush for routine flushing: 3-5 mL
- Amount of normal saline flush given before and after medicine: 10 mL

To watch the Tunneled Central Line video scan this code

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