

CHEST PORT/INFUSION PORT/R-PORT/S-PORT

A port is a device placed underneath the skin and into a large vein for intravenous access. In a child, it is inserted under the skin in the operating room. In an adult it may be inserted in angiography.


Your port can be used for giving intravenous (IV) medications, IV fluids, IV nutrition, blood products, or for drawing blood specimens.

PORT CARE TIPS

1. When a needle remains in your port and it is being used for IV therapy (is accessed), **it needs to be flushed with heparin every 24 hours.** Heparin flush is injected to prevent blood clots from forming. If this is not done daily, blood may clot off the end of the port. This heparin dose is small and should not affect your body's ability to clot. The heparin dose and concentration for flushing your port will be taught to you during your training. Your port should be flushed when your infusion is finished, if blood has been drawn from the port, or if blood backs up in the IV line.
2. While the port is being used for IV therapy, cover the site with plastic wrap and tape before bathing.



3. While the port is being used for IV therapy, the site needs to be covered with a transparent dressing at all times. The dressing and the needle need to be changed weekly. The cap on the end of the access needle is changed every week with needle change or after blood is drawn.
4. If the dressing becomes loose or soiled before the scheduled dressing change, you and your caregiver will need to follow the directions to clean the area and apply a new dressing.

<p>5. During the summer months you may need to change your dressing more frequently.</p> <p>6. You must clean the skin with a ChloroPrep® swabstick before replacing the dressing.</p>	 An illustration of a wooden Adirondack chair with a slatted back and seat, positioned on a light blue square background. To the right of the chair is a stylized sun with a yellow center and multiple sharp, multi-colored rays (purple, blue, green, yellow) extending outwards.
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- 7. Inspect the port site daily for any signs of infection—swelling, redness, drainage or tenderness.
- 8. When your port is not accessed, it is recommended that it be flushed every month with 5mL heparin flush.

STEPS TO MINIMIZE CONTAMINATION

The term "sterile" will be used frequently. A product is sterile after undergoing a special process that eliminates germs. Steps that you can take to minimize contamination are as follows:

1. Before starting any procedure, **ALWAYS** wash your hands thoroughly with an antibacterial soap such as Dial[®]. This will decrease the chance of infection.
2. Select a work area free of dust and drafts and away from household traffic such as a spare bedroom. Keep this area free of dust, lint, and clutter. Pets should not be allowed in these areas. Adequate light should be provided. **Do not use bathrooms**, as they are likely to be places that have a large number of germs.
3. A stable tray, Formica[®] or similar products (e.g., metal, glass or Plexiglas) placed over a dresser or end table can be used. Clean work surface with a household cleaner such as alcohol, bleach or dish soap, or you may place a clean paper towel on work surface. Nothing should be stored on the table surface.
4. Work at a comfortable pace. *The risk of contamination increases if you rush through the procedures.*
5. Store all your medication solutions and supplies away from other household items. Do not store urine test kits, ostomy supplies or similar items with any medication or supplies.
6. Keep all supplies, especially medication, needles and syringes, out of the reach of children and pets.
7. Make sure each item is sterile by checking for visible signs of contamination such as an opened package or cloudy fluid. A good rule of thumb to follow is: **when in doubt - throw it out.** Call *HomeMed* as to whether to throw the item away or return it to us.
8. When piercing, opening, or connecting sterile items, allow only sterile surfaces to touch other sterile surfaces. Never touch sterile parts with your hands or allow a sterile item to contact a non-sterile surface. Parts of supplies that must be kept sterile are protected with a cover.
9. If you are inserting a sterile needle through a non-sterile surface, always use an alcohol wipe to **vigorously** scrub the surface. Never retouch this area after cleaning it.
10. Contaminated or damaged supplies should **NEVER** be used (for example: if protective coverings have fallen off medication vials).

HANDWASHING

Thorough handwashing is a very important step before any port care procedure because it decreases the risk of infection. Washing will clean hands, but not sterilize them, so care must still be taken when handling your catheter or supplies. An antibacterial soap like Dial® may be used.

Wound, ostomy, or fistula care **MUST** be done separately from catheter care procedures. Germs normally live in your intestinal tract and in ostomy or fistula fluids. If these germs or germs from improperly washed hands enter your bloodstream through the catheter or medication solution they could cause a severe blood infection (septicemia).



Procedure:

1. Turn on water and adjust to warm. Leave water running throughout the entire procedure.
2. Wet your hands and wrists under the running water.
3. Apply antibacterial soap and scrub **VIGOROUSLY** for 15 seconds. Work lather between fingers and under nails, over palms and back of hands.
4. Rinse hands and wrists under running water with your fingers pointing up towards the ceiling.
5. Dry hands with clean paper towel from the tips of the fingers down. Turn off the water with a paper towel.

If you wish, you may also use a waterless soap to clean your hands. You may not be able to use waterless soap if you have a rash or cuts on your hands. This is because waterless soap contains ethyl alcohol that may cause a stinging or burning feeling. If this occurs, use an antibacterial soap. Also, do not use a waterless soap if your hands become soiled with body fluids.

1. Place a dime size amount of gel into one hand.
2. Rub into palms and backsides of hands and between fingers.
3. Rub gently for about 10 seconds and let air dry.



TIP:

Off-brand hand gels can be less expensive

Always check the label for the gel or lotion to contain either ethyl alcohol (ethanol), normal propyl alcohol (n-propyl) or isopropyl alcohol in concentrations between 60-90%

FLUSHING YOUR PORT

The instructions below are to be followed only if you are not infusing medication through your port. If you are infusing medications, refer to the administration sheets given to you. Each port lumen should be flushed daily when accessed and monthly when not accessed.

KEY POINTS:

1. Check the syringe for leaks, expiration dates, color changes and floating materials. If any of these occur, set aside and use another. Notify HomeMed.
2. Always check the bag label for your name, drug name, dose and how frequently you should flush the catheter. If the information does not match, call HomeMed immediately.

MATERIALS:

- (1) prefilled heparin flush syringe for each lumen of port
- (1) blunt needle for each prefilled syringe
- Alcohol wipes (1 for each lumen)
- Antibacterial soap
- Paper towels

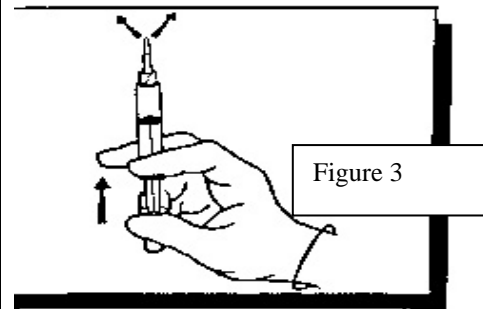
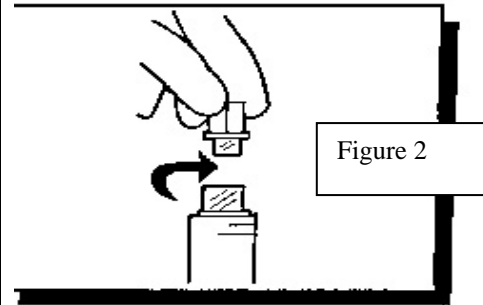
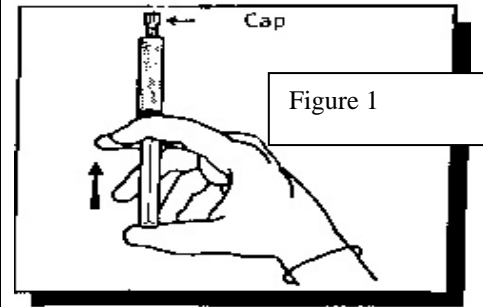
Procedure:

1. Place a trash can next to your work area.
2. Wash your hands by first wetting your hands and wrists under running water. Scrub vigorously with antibacterial soap for 15 seconds. Work lather between fingers, under nails, over the palms and back of hands. Rinse hands well by keeping your hands up with fingers pointing up towards the ceiling so that the dirty water runs toward your elbows. Dry your hands with a clean paper towel from the tips of fingers down. Turn off the faucet with the paper towel.
3. Gather your supplies and place in a corner of your work area.
4. Place a clean paper towel on your work surface or clean it with a household cleaner. Let the area air dry.
5. Place the supplies on your clean work area.



PREPARING YOUR HEPARIN FLUSH SYRINGE

1. Remove syringe from the package.
2. Hold the prefilled heparin syringe upward (figure 1).
3. **Do not remove the cap.** Press on the plunger (figure 1). **DO NOT** pull back on the plunger.
4. Remove the protective cap from the end of the prefilled syringe (figure 2).
5. Attach a blunt needle to the syringe by:
6. Twisting the green cap off the blunt needle. Attach the needle to the syringe by turning the needle clockwise. Do not remove the gray cap that protects the blunt needle.
7. Hold the syringe with the needle pointing upward. If bubbles appear, gently tap the sides of the syringe. The bubbles will rise to the top of the syringe.
8. Push the plunger to the 5 mL mark to push all the air out of the syringe (figure 3).



FLUSHING YOUR PORT

1. **Vigorously** scrub the end of the cap on your port with an alcohol wipe.
2. Remove the cap from the blunt needle of your heparin lock syringe.
3. Insert the blunt needle of the heparin syringe into the catheter cap and inject the heparin solution with a pumping action. When 0.5 mL remains in the syringe, gently push forward on the syringe catheter while clamping the port. (“Pump-pump-push and clamp”)
4. Dispose of the syringe in your sharps container.
5. The cap on your port does not need to be covered. You will need to clean the cap when you give your next dose of medication or flush the port.



Flushing and Removing a Port Needle

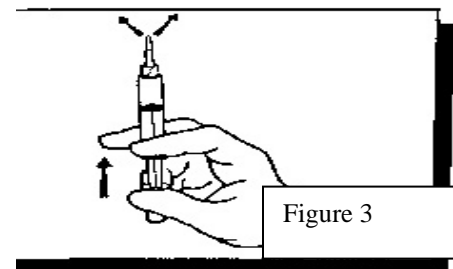
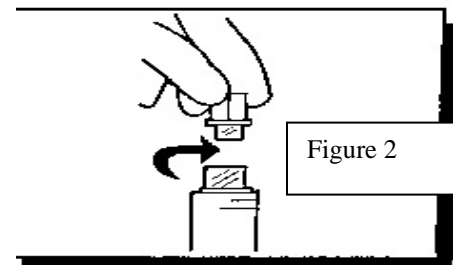
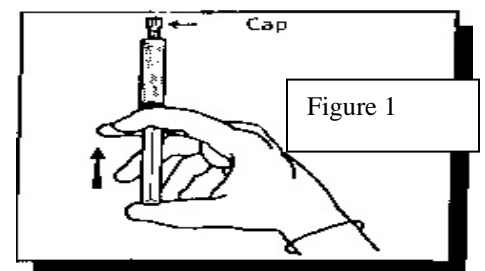
You may need to learn how to remove the needle from your port. It is important to always flush the port before removing the needle in order to keep it patent.

Supplies:

- (1) blunt needle
- (1) prefilled heparin flush syringe (remove from package)
- (2) alcohol prep pads
- (1) 2 x 2 gauze square
- (1) bandaid

Procedure:

1. Gather supplies, clean your work surface, wash hands and place the absorbent pad to the side of your work surface.
2. Hold the prefilled heparin syringe upward (figure 1).
3. **Do not remove the cap.** Press on the plunger (figure 1). **DO NOT** pull back on the plunger.
4. Remove the protective cap from the end of the prefilled heparin syringe (figure 2).
5. Attach a blunt needle to the syringe by twisting the green cap off the blunt needle. Attach the needle to the syringe by turning the needle clockwise. Do not remove the gray cap that protects the blunt needle.
6. Hold the syringe with the needle pointing upward. If bubbles appear, gently tap the sides of the syringe. The bubbles will rise to the top of the syringe.

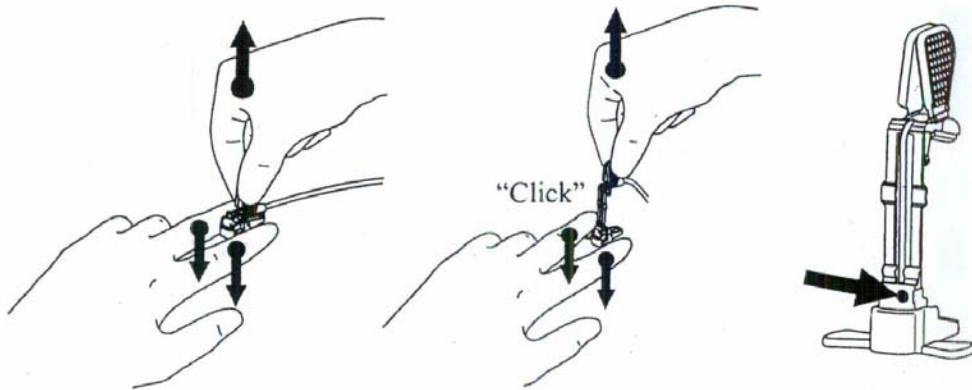


7. Push the plunger to remove all the air out of the syringe (figure 3).

8. **Vigorously** scrub the cap on your port with an alcohol wipe. Remove the cap from the needle of the heparin syringe and insert needle into the cap on your

port. Inject the heparin until you reach the 0.5 mL mark. Then, gently push on the syringe plunger and clamp the tubing.

9. Remove the catheter dressing.
10. Open the 2x2 gauze square and have ready to apply pressure at the needle site.
11. Remove port needle by securely holding the plastic base down with 2 fingers. Then firmly pull wings up until you hear or feel a “click” and **you can see the orange dot.**



16. Apply pressure for a few seconds with the 2x2 gauze square.
17. Cover the site with a Band-Aid if needed.
18. Place syringe(s), blunt needle(s) and used port needle in the sharps container.

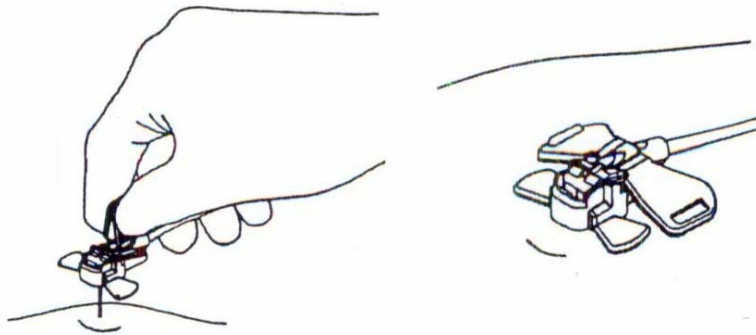
DRESSING AND NEEDLE CHANGE

Supplies:

- 1 Pre-packaged dressing kit
- 1 bent needle package (non-coring needle)
- 1 Catheter cap
- 1 prefilled syringe of Heparin Lock Flush
- 1 Blunt needle
- Alcohol wipes
- Antibacterial soap
- Paper towels

1. Place a trash can next to your work area.
2. Wet your hands and wrists under running water. Scrub **vigorously** with antibacterial soap for 15 seconds. Work lather between fingers, under nails, over palms and back of hands. Rinse hands well. Keep hands up with fingers pointing up towards the ceiling so the dirty water runs toward your elbows. Dry your hands with a clean paper towel. Turn off the faucet with the paper towel. Do not touch anything dirty (e.g., skin, clothes) after washing your hands. If you do, wash them again.
3. Place a clean paper towel on your work surface or clean it with a household cleaner, (bleach, alcohol or dish soap). Let the area air dry.
4. With your clean hands, place the materials that you will need on the **clean work area**.
5. Prepare 1 heparin-lock flush. (refer to previous page)
6. Wash hands.
7. Open the dressing kit. Use the sterile paper wrapping as a sterile field. Open bent needle, green catheter cap package and drop needle and catheter cap onto field without touching them.
8. Attach green catheter cap to bent needle.
9. **Vigorously** scrub the green cap with an alcohol wipe.
9. Flush catheter cap/bent needle with **heparin lock flush**.

10. Place only the bent needle on the sterile field. Allow the attached syringe to lie on the table (not on the sterile field).
11. Remove the ChloroPrep® swabsticks from the package one at a time.
12. Gently press the swabstick against the port site. Carefully clean around the port site by using a back and forth motion for 30 seconds. Repeat with each swabstick. Completely clean an area 2 inches around the port site.
13. Allow the ChloroPrep® to air dry for approximately 30 seconds. Do not blot or wipe away.
14. Discard each applicator after use.
15. Put on the pair of sterile gloves.
16. Locate the center of the port by feeling the edges with your thumb and index finger of non-dominant hand.
17. Grasp bent needle by the “wings”. Remove the needle cover. Allow the syringe to dangle.



18. Insert needle into the skin over the center of the port. Continue to advance needle until resistance is felt.
19. Pull back on syringe until you see blood in the tubing.
20. Flush the line with heparin. Leave the syringe in place.
21. Peel the backing from the dressing.
22. Apply the dressing by placing the center of the transparent window over the port needle, while holding the split side of the dressing off the skin. Then, overlap the soft cloth tabs under the tubing. This should form a tight seal around the port needle and tubing.

23. Press dressing into place.
24. Slowly remove the frame on the dressing while smoothing down the dressing edges. Smooth from the center toward the edges, using firm pressure.
25. Take one steri-strip from the frame of the dressing. Criss-cross or “butterfly” it around the tubing and attach it over the dressing. (Figure 3)
26. Place the other steri-strip over the butterfly to hold it in place.
27. Remove the empty heparin syringe from the green catheter cap.
28. The cap on your port does not need to be covered. You will clean the cap when you give your next dose of medication or flush the port.
29. Place the syringe(s) and blunt needle(s) into the sharps container.

PORT PROBLEMS

Catheter problems may occur but may be prevented by carefully following the instructions given to you. Below are a list of the signs and symptoms, what to do should they occur, and how to avoid them.

INFECTION:	WHAT TO DO	HOW TO AVOID IT
BLOOD INFECTION Fever, chills, swelling.	Call your physician.	Follow instructions at all times to avoid contaminating the port. Wash your hands with antibacterial soap.
EXIT SITE INFECTION Foul odor, oozing discharge, pain or heat at needle site.		Change dressing if loose or wet. Do not use contaminated supplies.

OCCLUSION:	WHAT TO DO	HOW TO AVOID IT
There is a blockage that prevents the infusion to continue and you are unable to flush the port using normal gentle pressure.	Do not use extra pressure Check for closed clamps, kinks in the tubing or port. Open clamps. If these are not the cause there may be a clot in the port. Call your physician or <i>HomeMed</i> .	Flush the port as instructed, when the infusion is completed or once a month if no infusions are scheduled. Flush if blood has backed up into the tubing.

SWELLING AT NEEDLE SITE	WHAT TO DO	HOW TO AVOID IT
There is swelling or/puffiness at needle insertion site.	Check needle placement/port patency. Stop infusion. Call your physician or HomeMed	Flush the needle/port as directed. Replace needle

THROMBOSIS	WHAT TO DO	HOW TO AVOID IT
Arm (on the same side as your catheter) becomes swollen and cool to touch. May also cause swollen neck, chest, or arm veins.	STOP THE INFUSION. Call your physician immediately.	None

INABILITY TO WITHDRAW BLOOD	WHAT TO DO	HOW TO AVOID IT
Inability to withdraw blood from port.	Check needle placement /port patency. Reposition yourself. Flush as directed	Flush port as directed Replace needle Call your physician