



Home Care Services

HomeMed ▪ MedEQUIP ▪ Wheelchair Seating Service

1-800-862-2731

Midline Catheter

A midline is a soft, flexible catheter inserted into a vein in your arm by either a nurse at the bedside. The catheter is approximately 6 to 8 inches long, (Figure 1).

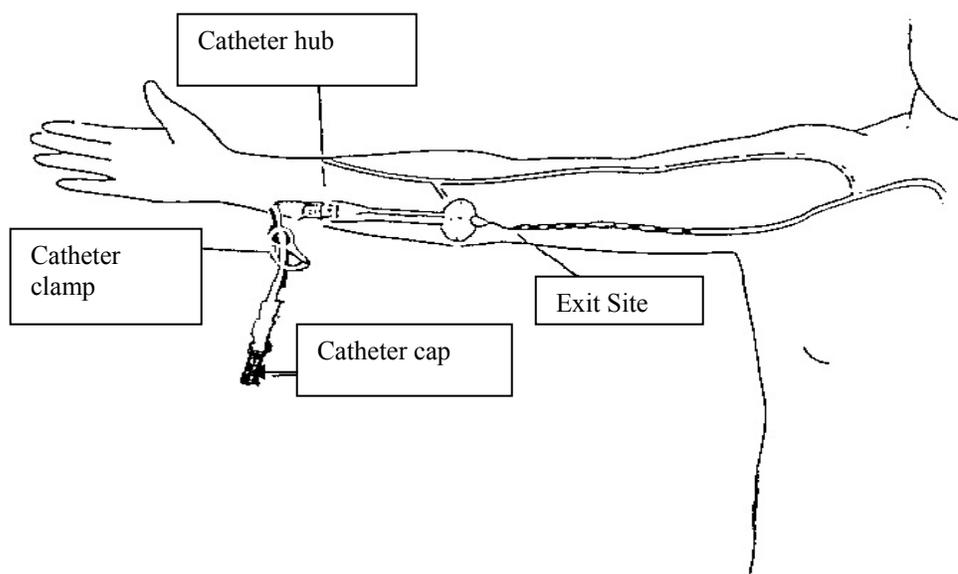


FIGURE 1 – PLACEMENT OF MIDLINE CATHETER

Your **midline** is anchored to your skin with tape (steri-strips). Take note of what the **midline** looks like on your arm before you are discharged. If it appears to be shorter or longer than when it was placed, call your doctor or *HomeMed*.

Your **midline** can be used for several weeks or months. If your catheter remains in place for a long time, you may see a small red bump at the exit site. This is normal.

KEY POINTS ON CATHETER CARE

1. Your catheter **MUST** be flushed every 12 hours even when you are not infusing fluid or medication.
 2. Cover the area around the **midline** with plastic wrap before bathing or showering. Tape above and below the **midline** dressing
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3. The exit site should be covered with the transparent dressing at all times to decrease catheter infection. The dressing should be changed **ONCE** a week.
 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.
 5. During the summer months you may need to change your dressing more frequently.
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6. You must clean the skin with a ChloroPrep® swabstick before replacing your dressing.
 7. Carefully inspect the site for any signs of infection (swelling, redness, drainage or tenderness).
 8. The extension tubing and catheter cap should be changed once a week with each dressing change.

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 clean 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 catheter 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 CATHETER

The instructions below are to be followed only if you are not infusing medication through your catheter. If you are infusing medications, refer to the administration sheets given to you. The catheter must be flushed twice a day when not in use.

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 catheter
- (1) blunt needle for each prefilled syringe
- Alcohol wipes (1 for each lumen)
- Antibacterial soap
- Paper towels

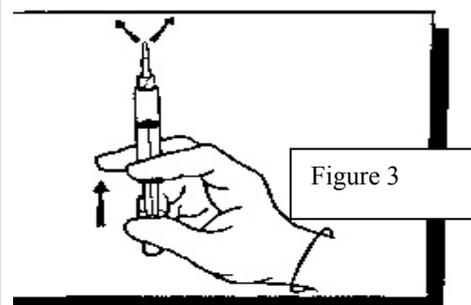
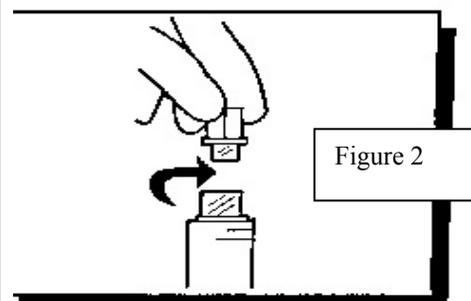
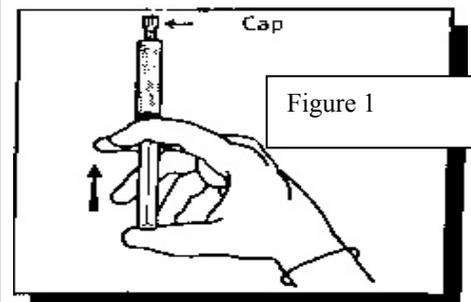
Procedure:

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 package.
2. Hold the prefilled heparin syringe upward (figure 1).
3. **Do not remove the cap.** Push 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:
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 the 5 mL mark to push all the air out of the syringe (figure 3).



FLUSHING YOUR CATHETER

1. **Vigorously** scrub the end of the cap on your catheter with an alcohol wipe.
2. Remove the protective covering 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 catheter. (“Pump-pump-push and clamp”)



4. Dispose of the syringe in your sharps container.
5. The cap on your catheter does not need to be covered. You will need to clean the cap when you give your next dose of medication or flush the catheter.

DRESSING CHANGE PROCEDURE USING A TRANSPARENT DRESSING

Key Points:

1. Change the dressing once a week or more frequently if it becomes soiled, loose, or wet.
2. Avoid pulling, bending, or kinking the catheter unnecessarily to prevent the catheter from cracking and leaking.
3. Apply a plastic wrap and tape it above and below the exit site or put on a long arm glove when showering or bathing.

Supplies:

- (1) PICC Dressing Change Kit which contains the following:
- (1) pair of sterile gloves
 - (1) ChloroPrep® swabstick packet (3 per package)
 - (1) gauze sponge
 - (1) skin prep pad
 - (1) transparent dressing
 - (1) sterile drape
 - (1) Grip-loc securement device (separate from dressing kit)
- Paper towels

Procedure:

1. Wash your hands.
2. Gather supplies and place them in a corner of the work area.
3. Clean your work area.
4. Open the dressing kit. Remove sterile drape. Open drape and place on your work surface. Place the contents of the kit on the sterile drape.
5. Remove the old transparent dressing. Do this by pulling the dressing one corner at a time toward the catheter exit site. After all the corners are loosened, hold the catheter down and pull the dressing up and off. **DO NOT TOUCH** the skin or catheter that was under the dressing.



6. Carefully inspect the exit site for any sign of infection (*swelling, redness, drainage, or tenderness*). If any of these signs are present, notify your physician or *HomeMed* after finishing the dressing change procedure.
7. Remove the ChloroPrep® swabsticks from the package one at a time.
8. Gently press the swabstick against the catheter exit site. Carefully clean the area around the catheter by using a back and forth motion for 30 seconds. Completely clean an area 2 inches around the catheter exit site. Repeat with each swabstick. (Figure 1).

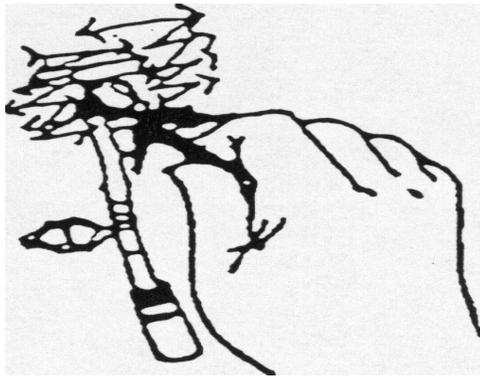


Figure 1 – Cleaning the Skin Around the Catheter

9. Allow the ChloroPrep® to **air dry** for approximately 30 seconds. Do not blot or wipe away. Do not fan or blow on area.
10. Discard the swabsticks after a single use.
11. Apply skin prep to the area around the catheter exit site, starting 1 inch away from the catheter and working outward. Let dry until smooth and shiny.
12. Peel the backing from the dressing.
13. Apply the dressing by placing the center of the transparent window over the catheter exit site, while holding the split side of the dressing off the skin. Then, overlap the softcloth tabs under the catheter this should form a tight seal around catheter disc.
14. Press dressing into place.
15. Slowly remove the frame on the dressing while smoothing down the dressing edges. Smooth from the center toward the edges, using firm pressure.

16. Take one steri-strip from the frame of the dressing. Criss-cross or “butterfly” it around the catheter and attach it over the dressing. (Figure 2)
17. Place the other steri-strip over the butterfly to hold it in place.

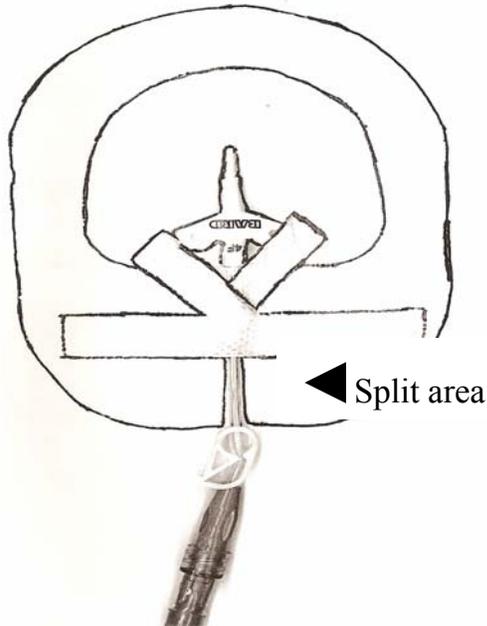


Figure 2 – Placement of Steri-strips

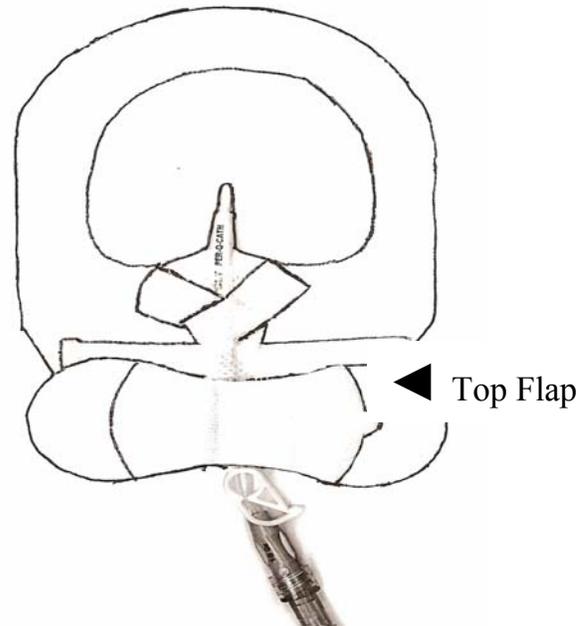


Figure 3 - Placement of Grip-Lok

18. Open Grip-lok package.
19. Peel the paper backing from the Grip-lok and place under the catheter on the split area of PICC dressing. (Figure 3)
20. Lift the top flap and remove the paper backing where it says “peel”. (Figure 3)
21. Place catheter tubing on bottom adhesive strip.
22. Place top flap over the tubing so that the tubing is placed between adhesive strips and top flap is secured. (Figure 3)

EXTENSION TUBING AND CATHETER CAP CHANGE

KEY POINTS:

1. The extension tubing and catheter cap should be changed weekly on each lumen of your catheter.
2. Change the extension tubing and catheter cap when you do your dressing change.

Supplies:

- (1) extension tubing for each catheter lumen
- (1) Catheter cap for each catheter lumen
- (1) prefilled heparin flush (blunt needle attached) for each catheter lumen
- Alcohol wipes

Procedure:

1. Wash hands, gather supplies. Close the clamp on the midline catheter (or extension tubing).
2. Open the catheter cap and the extension tubing packages.
3. Remove the clear protective cover from the end of the catheter cap. Remove the protective cover from the extension tubing.
4. Attach the catheter cap to the extension tubing by twisting clockwise.
5. Remove the protective covering from the blunt needle of your heparin lock syringe.
6. Insert the blunt needle of the heparin syringe into the catheter cap and inject the heparin solution.
7. Push the syringe plunger until you see fluid coming through the end. Leave the blunt needle/syringe inserted in the catheter cap and place on the open extension tubing wrapper.
8. Wrap an alcohol wipe around both the ends of the old extension tubing and the midline at the catheter hub.
9. Remove the old IV extension tubing by twisting counter clockwise. Quickly remove the protective cover from the end of the new extension tubing and attach to the midline by twisting clockwise.
6. Flush the remaining heparin flush into your catheter. Place the syringe(s) and blunt needle(s), into the sharps container

CATHETER 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 Fevers and chills.	Call your physician.	Follow instructions at all times to avoid contaminating the catheter.
EXIT SITE INFECTION Foul odor, oozing drainage, pain or heat at exit site.		Wash your hands with antibacterial soap. 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 catheter using normal gentle pressure.	Do not use extra pressure. Check for closed clamps, kinks in the tubing or catheter. Open clamps. If these are not the cause there may be a clot in the catheter. Call your physician or <i>Homemed</i> .	Flush the catheter as instructed, when the infusion is completed or once a day if no infusions are scheduled. Flush the catheter if blood has backed up into the extension.

BREAK or ACCIDENTAL CUT IN CATHETER	WHAT TO DO	HOW TO AVOID IT
Leaking of fluid from the break or cut area. An internal leak could cause swelling of the arm which will be cool to touch and painful.	Clamp the catheter between the skin (exit site) STOP THE INFUSION. Call your physician the catheter will need to be repaired or replaced.	Do NOT use scissors near the catheter. Never use excessive force to flush the catheter. Never use a syringe smaller than 10mL size to flush or infuse medication.

THROMBOSIS	WHAT TO DO	HOW TO AVOID IT
Arm (on 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