

# Going Home with Intravenous Antibiotics

## Giving Your Medication by Gravity and PICC

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Information for adults starting the Home IV Program at  
Nanaimo Regional General Hospital

Your Name: \_\_\_\_\_

## **Introduction**

This booklet is for people who are starting the Home Intravenous (IV) Program at Nanaimo Regional General Hospital. This program gives people the opportunity to stay at home and enjoy their normal activities while still getting the medical treatment they need.

Knowing what to expect will help you be more involved in your care and better prepare you to get your antibiotics at home.

If you have any question regarding the Home IV Program please contact the Outpatient Antibiotic Nurse at 250-755-7691 local 53596.

**The information in this handout is intended only for the person it was given to by the health care team. It does not replace the advice or directions given to you by your doctor.**

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## Contact Phone Numbers

Your Family Doctor: \_\_\_\_\_

Specialist Doctor: Dr David Forrest / Dr Alastair Teale 250-755-6233 / Other: \_\_\_\_\_

### Home Care Nursing:

Available 7 days per week from 8:00 a.m.-9:00 p.m.

Nanaimo: (250) 755-6229

Parksville/Qualicum: (250) 951-9500

Ladysmith: (250) 739-5779

### Home IV Nurse

250-755-7691 ext 53596 M-F (except holidays) 9:00-5:00

**Home IV Pharmacist:** 250-755-7691 ext: 52308

### NRGH Medical Daycare:

250-716-7795 (between 8:00 a.m- 4:00 p.m.)

250-755-7691 ext 53598 (between 4:00-7:30 p.m.)

Available 7 days a week from 8:00 a.m.-7:30 p.m.

Statutory holidays: 9:00 a.m.-1:00 p.m

### Oceanside Health Centre:

250-951-9550 (7:30 a.m. – 6:30 p.m.)

### Ladysmith Health Centre Medical Daycare:

250-739-5788 ext 54828 (8:00 a.m. – 4:00 p.m.)

Call Home Care Nurse for concerns about:

- Your PICC line
- The dressing on your PICC line
- Beeping CADD pump

Call Medical Daycare for concerns about:

- Your medication bags
- Needing more supplies
- Non functioning PICC lines
- Non functioning CADD pump

Call your doctor for:

- Changes in your medical condition or infection
- Questions about your infection

### B.C. Nurse Hotline 24 hours/day 8-1-1

If you have a situation that requires emergency assistance, call 9-1-1

My Antibiotic is: \_\_\_\_\_ X \_\_\_\_\_ weeks

Weekly Blood Test: \_\_\_\_\_

Medication & Supply Pick-up: \_\_\_\_\_ after 11:00 at

Medical Daycare / Oceanside Health Centre / Other \_\_\_\_\_

## Appointments

Date & Time	With Who?	Questions I have

## The Home IV Program Care Team

**You and your family:** You are an essential member of your Care Team. Please keep us up to date about changes in your healthcare and other symptoms

**Physician:** Your family doctor will order your antibiotics and monitor your infection. If you have had surgery, your surgeon may also monitor your surgical site. You may be referred to an Infectious Disease Specialist who will follow your care.

**Pharmacist:** A Pharmacist will plan your medication schedule and organize your medications to take home. The pharmacist follows your progress and makes medication changes to best treat your infection. They will call you weekly.

**Medical Daycare Nurse/Home IV Nurse:** will visit you at the hospital to explain the program and teach you and/or your support person how to give your antibiotics, how to use the special devices (bags, tubing, and special pump, as needed) and how to care for your intravenous line.

**Community Care Nurses:** The community nurse will meet with you once you are home/outpatient clinic to check your intravenous line, change the dressing and check your medication pump. This nurse will help you with continuing teaching, listen to and guide you with any concerns and questions. The nurse will see you in your home or in a Homecare clinic in your community.

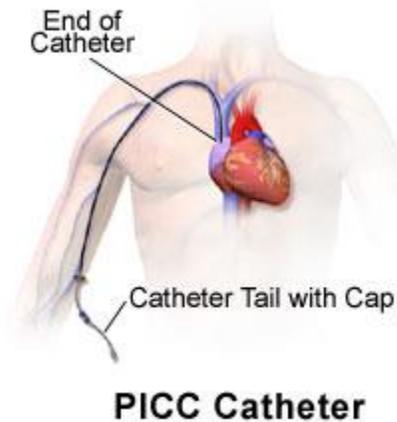
## Getting ready to go home on IV antibiotics:

### PICC Line

Your doctor will arrange to have an intravenous line placed in your arm. This line is called a Peripherally Inserted Central Catheter (PICC).

### What is a PICC:

PICC is an abbreviation for: Peripherally Inserted Central Catheter. A PICC is a long, thin, flexible tube which is known as a catheter. It is inserted into one of the large veins of the arm near the bend of the elbow. It is then slid into the vein until the tip sits in a large vein just above the heart. The end of the catheter outside your body is secured to the skin on your upper arm.



Your ANTIBIOTICS will be given through your PICC line.

Where the PICC line enters your body, there is a clear adhesive dressing. It is important to keep this dressing clean, dry and not remove it.

- A Home Care Nurse will visit you to change this dressing and make sure your line is working properly.
- If the dressing becomes wet or is coming off, please call the Home Care Nurse to replace the dressing. Do not attempt to change the dressing on your own.

## **How do I care for my PICC line?**

- When you bathe, the clear dressing must be kept dry. We suggest wrapping the area with a dry face cloth and then covering with plastic wrap. Use tape to secure the plastic wrap in place.
- You should not swim or soak your arm in water. This increases your chances of getting an infection.
- You may use your arm for normal activities, but for the first 24 hours avoid strenuous activities.
- It is important to not pull on the PICC line. Take care when dressing. It is best to wear the intravenous tubing under your clothing to prevent pulling on the tube with your daily activities.

## **Aseptic Technique**

The basic principles of **Aseptic Technique** are based on keeping everything as clean as possible. It is important to keep all your supplies and medication germ free to help prevent germs from getting into your body.

### **Work in a clean and well lit environment**

- Choose a clean work area. This area should not have dust, a draft or traffic. Try to avoid coughing, sneezing or smoking.
- Store your supplies in a clean area, away from children and pets.
- Always throw away supplies that you know or think may no longer be clean.
- Before you open any sterile packages, make sure the seals on the package are firmly closed. Any paper package should be dry, do not use any supplies from wet packages.

## The most important part of aseptic technique is washing your hands

If someone is helping you with your treatment, they should wash their hands too. Wash your hands before working with your equipment or supplies or anytime you touch your PICC line.

1. Have some paper towel ready to use before you start.
2. Turn on warm water.
3. Rinse your hands with water and add soap. Liquid soap is best, as bar soap can grow germs.
4. Vigorously rub hands together to create lather. Make sure to reach all areas of your hands (front, back and between fingers and your nails).
5. Rinse soap from your hands.
6. Dry your hands with the paper towel.
7. Turn off water faucet with the paper towel.



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## Activating the Bag



**1 Bend** the tube connecting vial to bag, up and then down to break seal.



**2 Fill** the vial by holding the bag with the vial down and squeezing the bag until the vial is half full. **Swirl** gently to mix.



**3 Turn** the bag so the vial is on top and squeeze bag to force air into vial — this empties the vial into the bag.



**4 All but a little of the medicine in the vial should empty into the bag. Repeat** if needed. **Leave** the vial connected to the bag.

## Getting Started

If your medication bags have to be stored in the fridge, you need to take one out of the fridge 60 minutes before your medication is due. *This will allow the fluid to warm up to room temperature.*

At this time, check your medication bag to make sure it is the correct drug, dose, that the medication is not expired, that the fluid is clear, and that there are no leaks.

When it is time to give your medication, wash your hands and the work surface. Use liquid soap and paper towels.

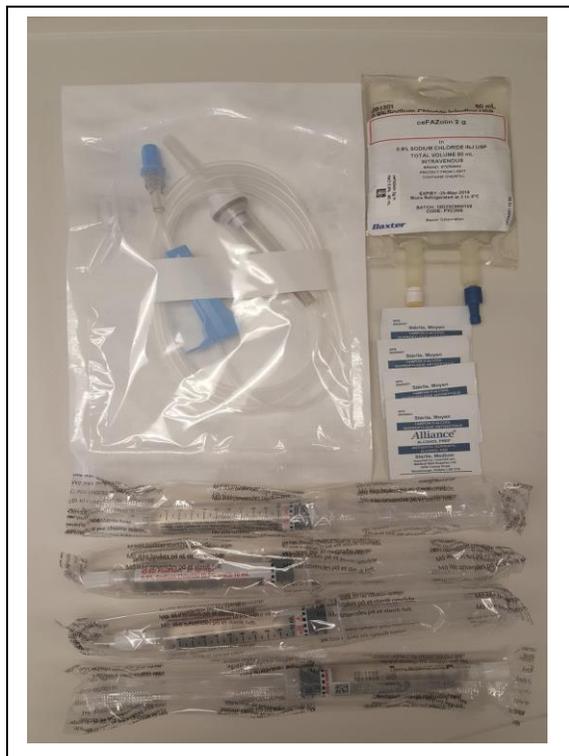
### Gather your supplies:

Medication bag

1 Package of tubing

Four Saline Flush Syringes

Alcohol swabs



## Preparing the Medication Bag

You will start with a new tubing each dose.

Pull open the package and remove the IV tubing. Straighten the tubing out and inspect it.



Close the roller clamp by sliding the white 'roller' down. *This will compress the tubing stopping the fluid from filling the IV tubing.*



Pull the blue tab off the tubing port of the medication bag. Carefully remove the spike cover from the I.V. tubing *being careful not to touch it*. Twist the spike into the tubing port of the medication

Hang the medication bag on the I.V pole or hook

Squeeze and release the drip chamber until it is half full. *This prevents air from being drawn into the tubing along with the fluid.*



Open the roller clamp to fill tubing with fluid. Once the fluid starts to drip out of the end the tubing, close the roller clamp. *There is no need to remove the protective cover from the end of the tubing as it is designed to allow fluid to flow around it. This helps to prevent you accidentally touching the end of the tubing.*



The back of the roller clamp has 2 prongs for holding the tubing. Clip the bottom part of the tubing into these prongs until you are ready to use it. *This prevents the end from dangling onto the floor.*

### **Preparing the Syringes and Flushing the PICC**

The PICC is flushed with 20mL of Normal Saline before you give the medication. It clears the PICC and helps you ensure that the PICC is working. If you cannot flush the PICC or if you feel resistance, Call Home Care. The PICC is also flushed with 20mL of Normal Saline after you have given the medication. It flushes all the medication out and keeps the PICC clear.

Inspect your PICC site before using. *It should be clean and dry. The dressing should be well stuck down. There should be no redness, swelling or pain. If you have concerns, please call the Home Care before giving your medication.*



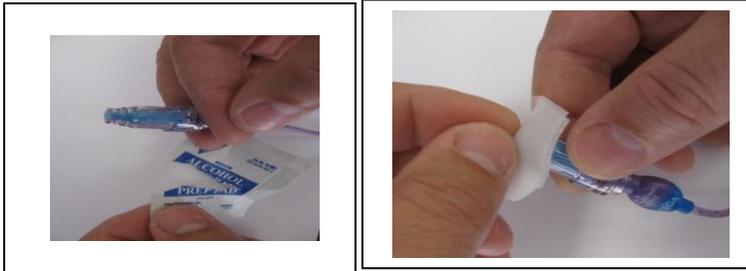
Open the package of all the prefilled Saline.  
Pull gently back on the plunger of each syringe to 'crack the seal.'

Twist off the cap from one of the prefilled 10ml Normal saline syringes and holding the syringe with the tip up gently push on the plunger to remove the air from the syringe



### Starting the IV Medication

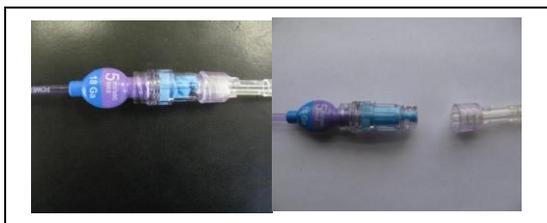
Tear open an alcohol swab and clean the end of the cap by scrubbing the top with the swab for 30 seconds. Allow it to dry.



Twist the pre-filled syringe on to the cap.

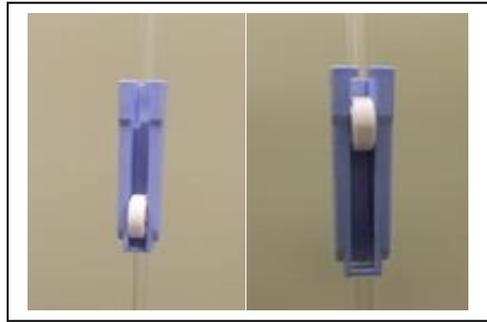
Push on the plunger, if the fluid goes in easily; inject the normal saline using a push pause technique until almost all the fluid is given. **Leave a little of the normal saline in the syringe** and then twist the syringe off the cap. Repeat with another syringe.

Pull the bottom part of the IV tubing out of the clip on the roller clamp and remove the protective cap.



Twist the end of the I.V. tubing into the cap. *Be careful not to touch the tips of the cap or IV tubing.*

Slowly open the roller clamp on the IV tubing. Count the number of drops per minute that your pharmacist and/or nurse have told you to set the drip rate.



**Your drip rate is:**

\_\_\_\_\_ drops in 15 seconds.

\_\_\_\_\_ drops in 5 seconds.

Your medication should run in over \_\_\_\_\_ minutes

Check the drip rate of your medication every 5-10 minutes. *Changes in your body position may change the drip rate.*

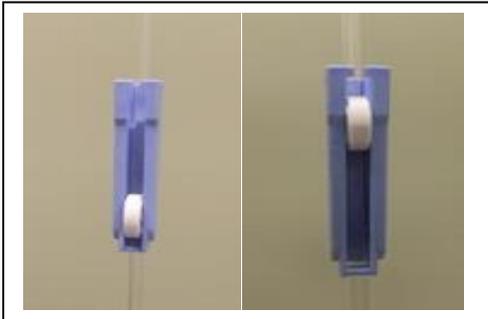
### **If the IV Won't Drip or Won't Drip Fast Enough**

Check that the slide clamps are open on the I.V. tubing and extension

- Check for kinks in the I.V. tubing.
- Check that the I.V. tubing is securely attached, disconnect and reattach to the cap.
- Check that I.V. bag is high enough above you (about 3 feet above your shoulder)
- Check that the I.V. site flushes easily with a syringe
- Straighten your arm and make sure there is nothing above the I.V. site that is constricting blood flow. (e.g. tight sleeves, netting...)

- Call Home Care or the Home IV Nurse on the phone if you are not sure what the problem is. They may be able to troubleshoot over the phone or they may ask you to come in to hospital.

### Stopping the IV Medication



Close the roller clamp when the medication bag is empty and while there is still fluid in the drip chamber.



Twist the IV tubing off the cap and throw it away. *You can let go of the cap.*

Clean the end of the cap with a CHG/Alcohol swab and flush your PICC.

**Congratulations Well Done!**

## Giving Your Next Doses

- If you are only giving one dose of one medication a day, you will start with a new IV tubing each day. Always flushing your PICC before and after the dose of medication is given.
- If you are giving the same medication more than once a day you will re-use the same set of tubing for each dose in the 24 hour period. (i.e 1 tubing/24h). You will attach a red cap to the end of the IV tubing to keep the tip sterile between doses during the day.
- If you are giving two or more different medications. You will use different IV tubing for each medication and change the IV tubing with each dose (*as above*). You will flush your PICC before and after each dose of medication. *If you are giving one medication and then another immediately after; you will need to flush your PICC in between the different medications.*

## Quick Reference List

1. Take medication bag from the fridge 60 minutes before it is to be given
2. Check the medication bag
3. Assess your PICC site
4. Gather supplies ( 4 saline flushes, alcohol swabs, 1 tubing/per medication)
5. Prepare workplace and wash hands
6. Prepare your medication bag and tubing
7. Flush your PICC with two syringes (20 mls)
8. Attach the IV tubing to the cap
9. Start medication, check drip rate
10. Allow medication to infuse over recommended time
11. Stop medication when the medication bag is empty by closing the roller clamp.
12. Disconnect the IV tubing from cap and throw away the IV tubing.
13. Flush PICC with two syringes

## Reminders

- Check your PICC site prior to each infusion
- If your PICC site is red, swollen, or painful, call Home care before giving your medication
- Remove your medication from the refrigerator 60 minutes before administering
- Do not use any solutions that are the wrong color or have particles in them when they should be clear
- Do not use any sterile package that has become wet or damp. (Moisture may allow microorganisms to enter sterile packages)
- Always check that sealed sterile packages have no breaks or punctures. This includes tubing, bags and syringes
- Always check the expiry date on your solutions and equipment. If they have expired, do not use
- When you put 2 pieces of sterile equipment together, DO NOT touch either end to anything that is not sterile
- Always throw away items that you know, **or even suspect**, have been contaminated
- Never use scissors or sharp objects near the I.V. tubing or PICC line

**Possible Problems and Solutions**

Possible Problems	Signs	How to prevent problems	What to do
<b>INFECTION</b>	Fever, chills, Temperature above 38 °c Flu like symptoms Redness, swelling, Drainage from PICC site	Wash hands before doing any I.V. care Follow aseptic technique Have PICC dressing changed if wet or coming off	Phone your Doctor or go to the emergency room
<b>VENOUS THROMBOSIS</b> <i>(a clot forms in the vein)</i>	Swelling in the arm, neck and face Distended arm, chest or neck veins on the side of the PICC Pain in the armpit Arm and hand on the PICC side looks bluish or dusky	Be sure to drink enough fluids Normal movement of your arm with the PICC	If you notice any changes in your PICC arm call Home Care to have the arm assessed. Phone your doctor or go to the emergency room <i>(blood thinners or other treatments may be ordered)</i>
<b>AIR EMBOLISM</b> <i>(This is extremely rare with valved PICC's)</i>	Shortness of breath, chest pain, light-headedness, and fast heart beat <i>A large amount of air has been rapidly infused into your PICC</i>	Check that all the air has been removed from the tubing before you start your drip Do NOT use scissors near your PICC Do not remove the slide clamp on the extension	This is an emergency: lie down on your LEFT side with your feet elevated <b>CALL 911</b>
<b>Air bubbles in the I.V. tubing</b>	<i>A few small bubble are fine.</i>	Do not let the bag run dry Check the tubing for air bubbles during set up and flush them out	Close the roller clamp when disconnecting your tubing from the luer activated valve Make sure the drip chamber is ½ full Disconnect the tubing from the one link connector and flush the tubing by opening the clamp and running the fluid out until the bubbles have been removed Reconnect the tubing to the one link connector
<b>BLOCKED PICC</b>	You are unable to flush the PICC using normal pressure	Maintain positive pressure when flushing the PICC Flush the PICC again if you notice blood in the extension Flush the PICC once a week when not in use	Straighten your arm Check for kinks in the PICC under the dressing If you cannot find the blockage, call Medical Daycare or the support Clinic in Parksville to arrange an appointment to have it checked This should be done as soon as possible

Going home with IV antibiotics

Possible Problems	Signs	How to prevent problems	What to do
<b>MECHANICAL PHLEBITIS</b>	Tenderness/pain and hardening of the vein Swelling, redness and warmth <i>(this occurs most often in the first week after insertion of the PICC)</i>	Avoid carrying anything heavy Avoid strenuous physical exercise If you need to use crutches, use forearm crutches instead of underarm crutches Check your PICC site before each use	Call the Home Care nurse and describe your symptoms Apply continuous low heat Exercise your arm gently
<b>ACCIDENTAL REMOVAL OF PICC</b>	PICC is completely out of your arm	Avoid tugging or pulling on the PICC Have the dressing changed if it becomes wet or loose Keep I.V tubing close to you when infusing medication	Apply Pressure to the insertion site for 5 minutes or until bleeding stops Cover with occlusive bandage Call the Home IV nurse or on the weekend call Home Care.
<b>PARTLY PULLED OUT PICC</b>	PICC is partly pulled out <i>(PICC is out further than it has been)</i>		DO NOT use your PICC. Call Medical Daycare or the Support Clinic in Parksville to have your PICC line assessed.
<b>Bleeding</b> (a sml amount is expected in the first 24h after PICC inserted.)	Excessive bleeding from around PICC (more than a quarter to a loonie size) or the bleeding is causing the dressing to lift off.	Avoid carrying heavy items. Avoid strenuous physical activity (normal activity is fine).	Apply pressure over the insertion site until bleeding stops. Call someone on the Nursing Team to have the dressing changed and the site assessed