

Renal Home Therapies

Dickson Building, 6th floor
Victoria General (VG) site, QE II
› Hours: 7:30 a.m. to 3:30 p.m., Monday to Friday

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Renal Home Therapies

Welcome to Renal Home Therapies.

- There are 2 Renal Home Therapies units:
 - › Peritoneal dialysis unit
 - › Hemodialysis unit
- Staff in each unit teach patients how to do dialysis treatments at home, including:
 - › **Peritoneal dialysis (PD)**
 - › Continuous ambulatory peritoneal dialysis (CAPD)
 - › Cyclor Dialysis™ (nightly automated PD)
 - › **Hemodialysis**
 - › Conventional (3 days a week)
 - › Short daily (6 to 7 days a week)
 - › Nocturnal (5 to 6 nights a week)
- A unit nurse will contact you with an appointment for your training. You are welcome to bring a support person to help with your training, if needed.

If you live more than 50 km from Halifax:

- The unit clerk can arrange for accommodations in Halifax for you and a support person.
- The unit clerk will arrange your accommodations and give you the details once your training has been confirmed.

Dialysis training

- A nurse will explain how dialysis is done and show you how to do it. You will then practice doing your own dialysis until we feel you can safely and comfortably do it on your own. **You will not be on your own until your nurse feels you are ready.**
- We will give you an instruction manual for your procedures to take home with you.
- For PD training, you will need a heating pad and scissors. We will review this with you on the phone when your training is arranged.
- There are nurses on call for PD and home hemodialysis patients to answer questions as needed. During your training, we will review the hours they are available and reasons to call them. This will also be in your instruction manual.

Supplies

- The Home Dialysis Program will give you supplies for home dialysis. There is no cost to you.
- A nurse will teach you how to order these supplies.

Follow-up

- When your training is done, you will become a member of our Home Dialysis Program.
- One of our **nephrologists** (kidney specialists) will follow your care.
 - › You will have regular appointments with the home dialysis unit to check on your dialysis, usually every 3 months.
 - › The clinic will book these appointments for you. You will get a letter in the mail with your appointment times. The unit clerk may call you with your appointment times (especially if they need to be changed).
 - › The nurse may call you before your appointment to confirm some of your information.
 - › During your clinic visit, you will see a nephrologist, a nurse, and a dietitian. You may also see a social worker, a pharmacist, and/or a research nurse.

Types of dialysis

Peritoneal dialysis (PD)

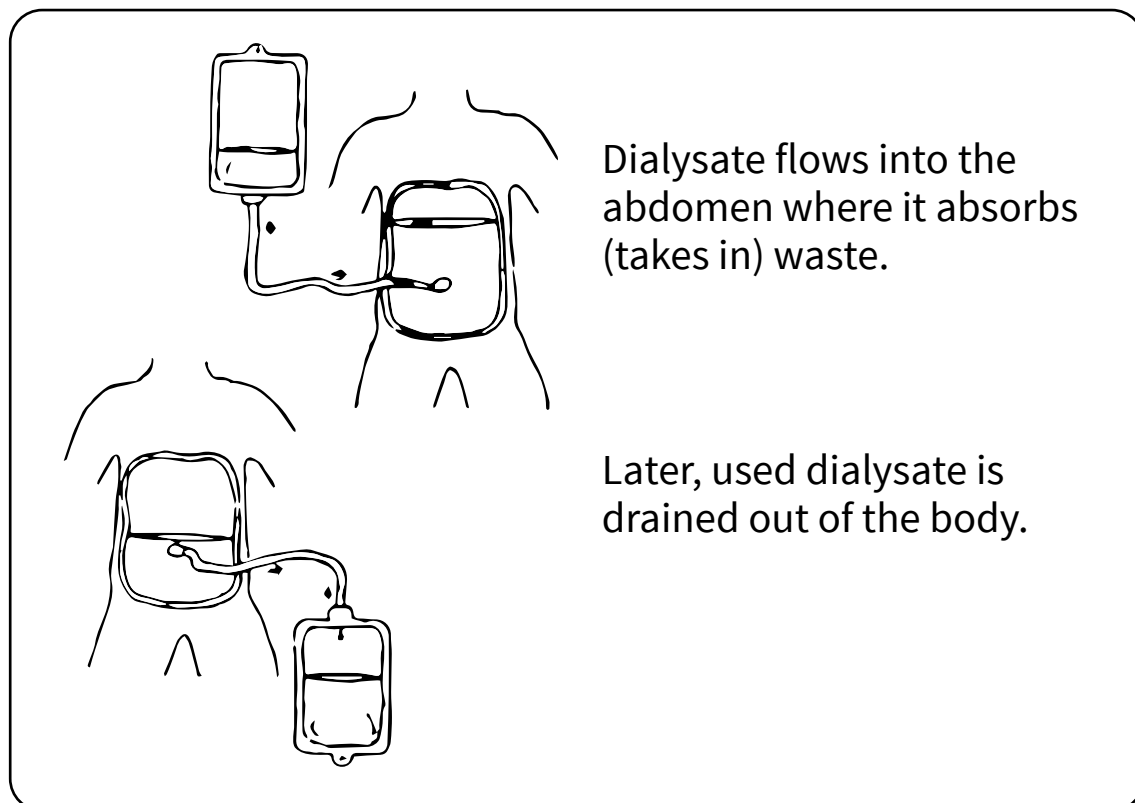
- PD is a type of dialysis that removes extra waste products and fluids from your body.
- The **peritoneal cavity** is a sac made of a thin membrane (called the peritoneum) that forms around many of the organs in your abdomen (stomach area).
- The dialysis fluid enters the peritoneal cavity through a tube called a **peritoneal dialysis catheter**.
 - › You will have a short surgery in the operating room (O.R.) or a day procedure by a nephrologist called a **percutaneous catheter insertion** to place the catheter.
 - › The catheter will be placed on 1 side of your abdomen, above or below your belly button. Your health care team will arrange for this procedure and give you and your loved ones the details.
- The catheter may exit through your abdomen or through your chest. The dialysis team will work with you to decide what is right for you.

Caring for your catheter

- Special care must be taken to make sure the incision (cut) where the catheter enters your body heals well and does not get infected.
- We will arrange for Home Care nurses to come to your home and change the dressing over your incision once every 7 days (1 week) for about 4 to 8 weeks (1 to 2 months) while the incision heals. We will order supplies for your dressing changes and give them to you.
- The incision must heal for at least 21 days (3 weeks) before the catheter can be used for CAPD.
- When you get dialysis training, your nurse will teach you how to care for your catheter yourself. Once the dialysis team decides that your catheter is healed, you will no longer need Home Care.
- A nurse from the Home Dialysis Unit will call you with an appointment for your PD training. Training usually takes about 4 to 5 days.

- **The peritoneum is a good filter for dialysis because:**
 - › It has tiny holes that let small particles (like blood waste products) and fluids pass from 1 side of the membrane to the other.
 - › It has millions of small blood vessels that carry the waste products and fluids that need to be filtered. When the peritoneal cavity is filled with a cleansing solution (called dialysate), the waste products and extra fluids that have built up in your blood move through the holes in the membrane and into the cleansing solution. When the peritoneal cavity is drained, the waste and extra fluids are removed. Then fresh cleansing solution is added to do the process again. Draining the fluid in the peritoneal cavity and refilling it with fresh fluid is called an **exchange**.
- **While doing PD, it is important to:**
 - › Have good personal hygiene (shower or bathe regularly)
 - › Be in a clean environment
 - › Wear a mask
 - › Wash your hands well and often
 - › Check your equipment

Peritoneal dialysis



2 types of PD

1. CAPD (Continuous Ambulatory Peritoneal Dialysis)

- An exchange is done 4 to 6 times a day (for example, at 7 a.m., noon, supertime, and bedtime). Your dialysis team will decide how many exchanges are right for you based on your needs.
- With the last exchange of the day, the solution stays in the peritoneal cavity overnight while you are sleeping.
- Each exchange takes about 30 to 45 minutes. **It should be done in a clean, well-lit room with the windows and doors closed.** Pets **must not** be in the room during procedures. They can carry bacteria and transfer this to your dialysis equipment, which may lead to infection.

2. Cycler or CCPD (Continuous Cycling Peritoneal Dialysis)

- A machine, called a **cycler**, is used to drain and fill the peritoneal cavity while you sleep. The cycler will be programmed for your needs. The nurses will teach you how to use the cycler. You will also get an instruction manual.
- The machine weighs about 25 pounds (about 11 kg) and you can take it with you if you are away from home.

Advantages

- Independence
 - › Many people are able to do their own PD and may not need someone to help them.
 - › Once your catheter exit site has healed, it is OK to get it wet **as long as the water is chlorinated** (like a swimming pool) **or salt water** (like the ocean).
- Flexibility
 - › You can choose when to do your dialysis. You can do it at work or anywhere you visit, **as long as it is in a closed room.**
- Travel
 - › It is easy to travel. You can take your supplies with you or, if you are flying, you can have your supplies shipped to your destination.

Disadvantages

- You must do 4 to 6 exchanges every day.
- You will have a permanent catheter in your abdomen.
- Infection
 - › Your peritoneal cavity could get infected.
 - › The skin around the catheter could get infected.
 - › To avoid infection, follow the instructions you were given.
- Lifting
 - › **Try not to lift anything heavier than 25 pounds.** Your health care team will talk about this with you.
- If your catheter exits through your abdomen, you **cannot** take a tub bath. If it exits through your chest, it is OK to take a tub bath.

The Renal Diet

- The foods you eat are an important part of your treatment.
- You will meet with a renal dietitian during your training and at your check-up visits. They will help you learn about the foods that are right for your health needs. If you have questions, you can call the dietitian during the day and they will review your blood work results.

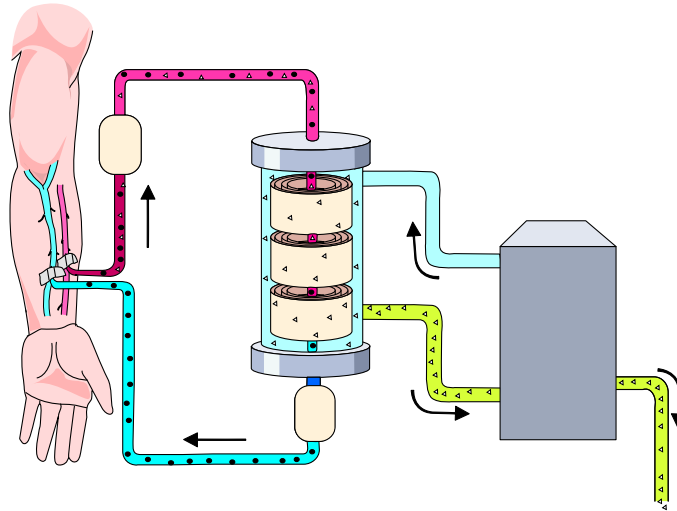
If you are doing PD:

- Eat foods that are high in protein
- Eat fruits and vegetables every day
- Limit sugar, sweets, and high fat foods
 - › The dialysate bags have a type of sugar called dextrose. Your body can absorb the dextrose when you do an exchange.
- Limit sodium (salt)
 - › This can help to control your blood pressure and fluids
- For most people who are doing PD, high blood potassium levels are not usually a problem. Your dietitian and nurses will help you control your potassium levels based on your blood work results.

Hemodialysis

- The word 'hemodialysis' comes from 2 words:
 - › 'Hemo' means blood
 - › 'Dialysis' means cleaning the blood with an artificial kidney (dialyzer) instead of with your own kidneys

Dialysis using the bloodstream



- The blood flows into the dialyzer, is cleaned, and is then returned to your body. The dialyzer has a space for blood and a space for dialysate (see page 4).
- Dialysate helps get rid of the waste products and extra fluids from your blood. New blood and dialysate constantly flow into the dialyzer, and waste products and extra fluids constantly flow out.
- Only a small amount of blood is out of your body at a time.

Access

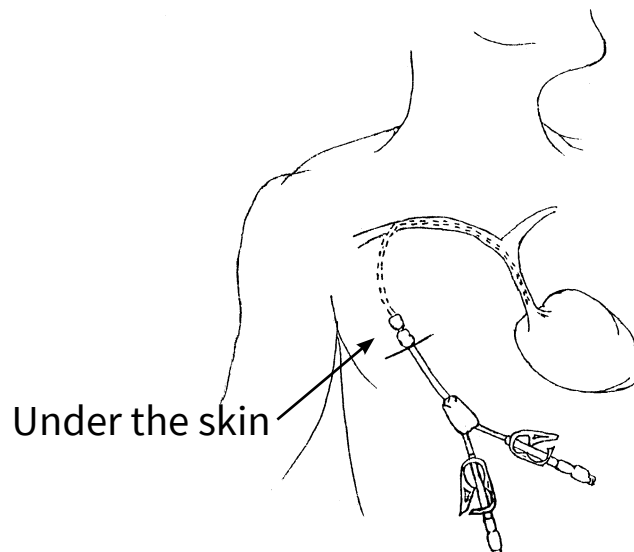
- There are 2 ways to access your blood:
 - › AV (arteriovenous) fistula
 - › Tunneled hemodialysis catheter

What is an AV fistula?

- A **fistula** gives access to your bloodstream for dialysis.
- An **arteriovenous (AV) fistula** is made by joining an artery and a vein during a short surgery in the O.R. It usually takes 6 to 8 weeks for the fistula to heal so it is ready to be used for dialysis. When the fistula is ready to have needles inserted (put in), it can be used to connect you to the dialyzer.
- A fistula is not right for everyone. If you cannot have a fistula, you will have a tunneled hemodialysis catheter inserted in your chest.

What is a tunneled hemodialysis catheter?

- A **tunneled hemodialysis catheter** is a tube made of special plastic that is used for dialysis.
- A doctor will insert the catheter under the skin of your chest into a large vein leading to your heart.
- The catheter has 2 **lumens** (tubes) that will come out of your chest.
 - › 1 lumen is used to carry blood from your body to special tubing connected to the dialyzer.
 - › 1 lumen returns the cleaned blood back into your body.



- For more information, ask a member of your health care team for pamphlet 1032, *Tunneled Hemodialysis Catheter*, or visit:
 - › www.nshealth.ca/patient-education-resources/1032

Home hemodialysis

There are 3 ways to do home hemodialysis. The dialysis team will work with you to decide which option is right for you.

Conventional

- › This type of hemodialysis is usually done 3 to 4 times a week, every other day with one 2-day break (for example, Monday/Wednesday/Friday or Tuesday/Thursday/Saturday). Each treatment lasts 4 to 5 hours.

Short daily

- › This type of hemodialysis is done 6 to 7 days a week for 2 to 3 hours each day.

Nocturnal

- › This type of hemodialysis is done overnight 5 to 6 nights a week, for 7 to 8 hours, while you sleep.

Advantages

- Less travel for treatments
- Fewer travel costs
- Less time in the hospital
- Fits your schedule
- More independence and control over your time
- Depending on the type of hemodialysis you choose, you may have days off
- Less limits on what foods you can eat with short daily or nocturnal dialysis than with conventional hemodialysis

Disadvantages

- Not as easy to travel as with PD, as you will need to plan for a dialysis unit to accept you as a patient during travel
- Food limits, if you are doing conventional dialysis
- You may need someone to help you

To do home hemodialysis

- **You must have a good working fistula or a tunneled hemodialysis catheter.**
- We will teach you (or your support person, if needed):
 - › How to insert the needles in your fistula
 - or
 - › How to connect to your tunneled hemodialysis catheter
- Your vital signs (like blood pressure and heart rate) must be within a safe range and you must feel well during and after your treatments.
- **Your safety is our most important concern.**
- Training is done one-on-one by a nurse. It usually takes place over 6 to 8 weeks, for 4 to 5 days a week.
- You may choose to have someone help you with your dialysis treatments. This is up to you. If you would like someone to help you, this person will attend the training sessions with you. They may be a family member or a friend.
- **You must have a space in your home that is big enough for a hemodialysis machine, a water treatment system, your chair, and supplies.**
- You will need a recliner-style chair which will lay flat with the feet up, or a bed if you are doing nocturnal hemodialysis.
 - › There must be enough room so a person can move around your chair.
- The room must have good lighting and a phone.
- You will need to have special electrical outlets, a drain, and a water treatment system put in your home. The hospital will cover the costs to put these in.
 - › A dialysis technician will install the water treatment system. This will not be done until you start training.
 - › You will be responsible for the cost of removing any of these items.
 - › Any other renovation costs will be at your own expense (like flooring, cupboards).

- **You must have supplies.**
 - › You will need an area in your home where you can store 20 to 24 medium-sized boxes each month. Your supplies must not get wet or freeze. You will also need a few supplies in your dialysis room.
 - › Supplies for hemodialysis will be delivered every 1 or 2 months, depending on the company.

The Renal Diet

- The foods you eat are an important part of your treatment.
- You will meet with a renal dietitian during your training and at your check-up visits. They will help you learn about the foods that are right for your health needs. If you have questions, you can call the renal dietitian during the day and they will review your blood work results.

Special considerations

- **If you live in an apartment:**
 - › You must have written permission from your landlord to have the hemodialysis machine and water treatment system installed in your apartment.
 - › It is strongly recommended that you have tenant or home insurance with water coverage.
- Nurses or biomedical technicians (people who check and fix your dialysis equipment and water treatment system) will need to visit your home (by appointment). Your health care team will arrange these visits as needed.
- **If you are planning to move:**
 - › Please tell your dialysis team right away, so they can coordinate your care and help you with your equipment and supplies.

This pamphlet is just a guide. If you have questions, please talk to your health care provider. We are here to help you.

What are your questions?
Please ask a member of your health care team.
We are here to help you.

Questions for my health care team:

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