

Fact sheet



Kidney Disease Treatment Options

The kidneys play a number of important roles in your body such as:

- extracting excess water to make urine (wee)
- controlling your blood pressure
- filtering waste products and toxins from your blood into your urine
- helping make red blood cells
- keeping your blood chemicals and salts in balance
- keeping your bones healthy

Chronic kidney disease (also referred to as CKD) is called a 'silent disease' as there are often no warning symptoms. Sometimes people lose up to 90 per cent of their kidney function before getting any symptoms. The symptoms can be very mild, or you may simply feel unwell or 'not yourself'.

Symptoms of reduced kidney function:

- Holding on to fluid which leads to breathlessness and swelling
- Tiredness
- Headaches
- Poor memory and concentration
- Being irritable
- Sleep disturbances
- Feeling washed out
- Itchiness
- Nausea and loss of appetite
- Weight loss
- Changed sexual function

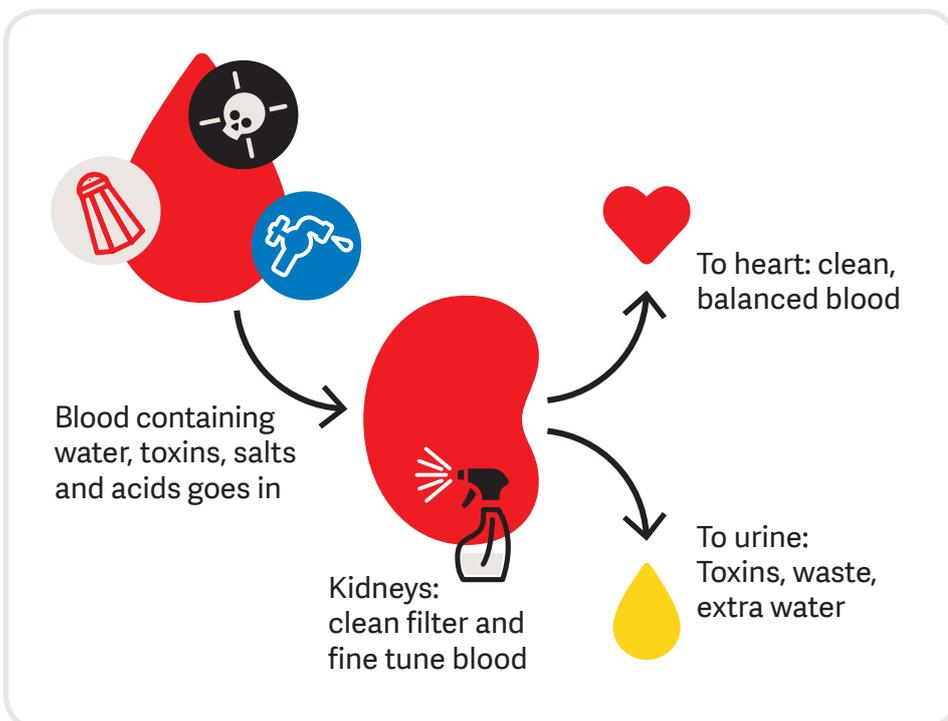
Treatment for end stage kidney disease

When the kidneys permanently stop working this is called end stage kidney disease.

There are 3 treatment options for people with end-stage kidney disease:

- Dialysis
- Transplant
- Supportive care

All 3 are important pathways a patient may decide to take in consultation with their kidney care team, and family.



Kidney transplantation

A kidney transplant involves the transplantation of one kidney into your body from either a living or deceased donor. If you are suitable for a kidney transplant, this is the most effective treatment for kidney disease. Compared with other kidney disease treatment options, transplantation will increase your life expectancy and improve your quality of life. However, your new kidney requires ongoing care. You will need to take anti-rejection medications for as long as your transplanted kidney functions.

How long your transplanted kidney will work can depend on many factors. In Australia, about 40 percent of transplanted kidneys are still functioning 15 years after transplant. Some people have had kidney transplants that have lasted more than 30 years.

If a transplanted kidney stops working, dialysis treatment will be necessary again. Another transplant may also be possible.

Everyday life with a kidney transplant

Some benefits of having a kidney transplant include:

- return to normal kidney function
- no need to have dialysis
- freedom to travel, with a bit of organisation
- control over your lifestyle
- no diet or fluid restrictions, but it is important to remain healthy.

There are issues with having a kidney transplant that you also need to think about:

- not everyone is suitable for a kidney transplant
- you need to be willing to have a lot of tests and have major surgery
- you will need to take anti-rejection medications every day.

You can see the *Kidney Transplant*, *Living Kidney Donation* and *Deciding to be a Live Kidney Donor* fact sheets for more information on this treatment option.

Peritoneal dialysis

Peritoneal dialysis (PD) is done at home by yourself, or a family member can be trained to help you. Your health care team will organise training to show you how to manage at home. There are two types of peritoneal dialysis: the daytime bags Continuous Ambulatory Peritoneal Dialysis (CAPD) and the night-time cyclers Automated Peritoneal Dialysis (APD).

Peritoneal dialysis uses your peritoneal membrane, a thin membrane or skin which surrounds and protects your organs in your abdomen (stomach) as a filter. During peritoneal dialysis, your membrane is used to filter waste products and extra fluid from your blood. A special catheter (tube) is used to move a special dialysis fluid called dialysate in and out of your peritoneal cavity all the time, so your blood is continually being cleaned.

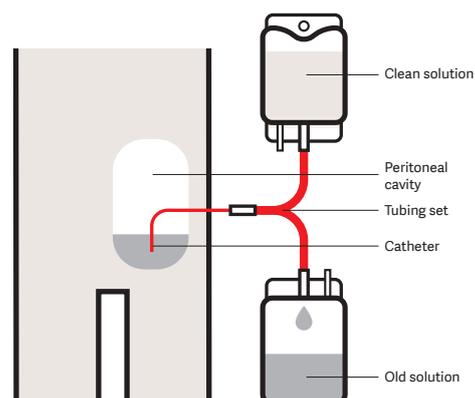
Everyday life with PD

Some benefits of having a kidney transplant include:

- freedom to travel, with a bit of organisation
- dialysis in your own home
- control over your lifestyle
- can be learnt by most people in one week
- no diet restrictions and very few fluid restrictions for most people
- can do exercise and sport
- can work
- all dialysis equipment is delivered to your home free of charge.

There are issues with PD that you also need to think about:

- You will need to stick to your PD schedule every day, although there is some flexibility for special occasions.
- You can get an infection of your peritoneal membrane, called peritonitis. Careful hand washing is the best way to prevent this.
- Your peritoneal membrane may eventually stop dialysing and you may have to change to using HD. This may take several years to happen, or it may not happen at all.



CAPD – Daytime Bags

About four times each day you need to change your bag. This means you need to attach a new bag of fluid, drain out the old fluid and put the new fluid in. It takes about 30 minutes and can be done almost anywhere. In between changes, you are able to go about your daily activities.

Overnight you have a long break while you sleep. Exchanges are usually done when you wake up, at lunch time, at dinner time and before going to bed. This can be flexible for busy days.

CAPD works by gravity. When the drain bag is put on the floor, the fluid drains out. By lifting the new dialysate bag above your shoulder, the new dialysate flows into your peritoneal (stomach) cavity.

APD – Night-time Machine

During APD, a machine called a cycler does exchanges for you. Each night your catheter (draining tube) is attached to the tubes of the cycler. It does several exchanges by moving the dialysate in and out of your body while you are asleep. APD is done every night and usually takes between 8 - 10 hours. During the day, dialysate is usually left in your body so that dialysis continues.

See the *Peritoneal Dialysis* fact sheet for more information about this treatment option.

Haemodialysis - home or dialysis centre

Haemodialysis (HD) can be done by you at home. If you need access to special medical care or are unable to do HD at home you will need to have your HD at a dialysis centre. Dialysis centres are sometimes located in a hospital or in the community (called a satellite centre).

During HD, your blood travels through a special filter called a 'dialyser' before being returned cleaned to your body. The dialyser has many tiny fibres (tubes). Each fibre has tiny holes in its walls. A special fluid called dialysate washes around the fibres. The extra fluid and waste products travel from your blood through the fibres and into the dialysate. Clean blood flows back to your body and the dialysate goes down the drain.

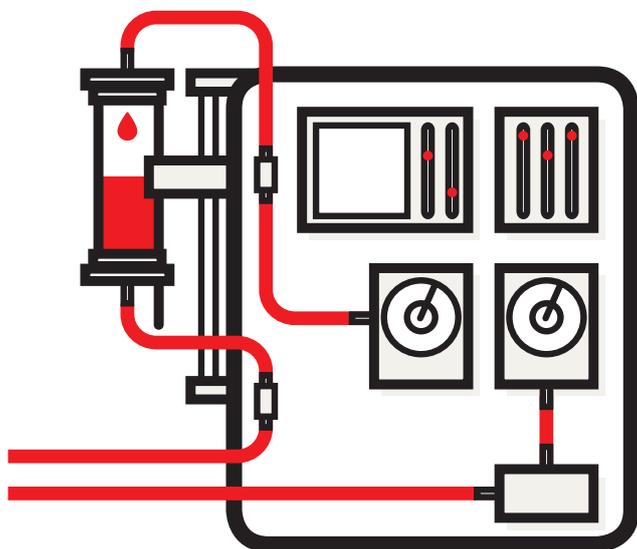
Everyday life with HD

- If you do home HD, you set your own dialysis schedule with advice from your health care team. You do the treatment at home during the day or overnight (called nocturnal dialysis). For some people, this control and flexibility is very important.
- If you have your HD at a dialysis centre, you need to go there three times each week. Your dialysis days will be set each week, and there is limited flexibility to change this. Sessions during the day or in the evening are usually available. Each appointment takes about 6 hours. You need to travel to and from the dialysis centre, and you are responsible for any travel costs.
- Doing your HD at home may mean you can do extra hours of dialysis, which can improve your health and quality of life.
- Your diet and fluids need to be carefully controlled unless you can do extra dialysis sessions.
- If you need to travel for work or a holiday, you need to book into another dialysis clinic.
- If you do home HD, most costs are repaid to you. Your power and water bills may go up, but you may receive financial support to help with this.

How do I learn to do home HD?

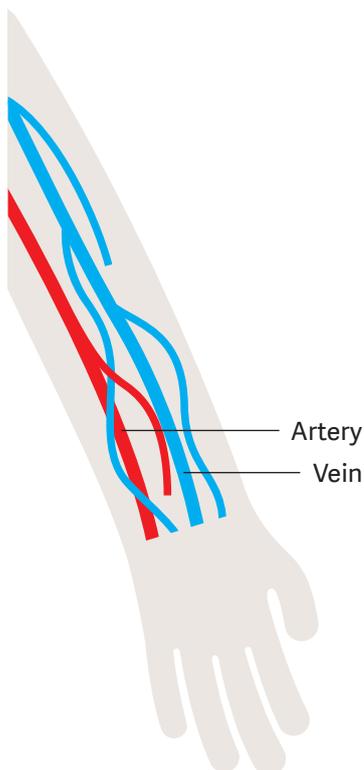
If you choose to do HD at home, special plumbing is installed in your home and the machine and everything else you will need will be provided. You will spend 6 - 8 weeks visiting a dialysis centre learning to do your own dialysis. Someone else can be trained to help you, but some people dialyse by themselves.

See the *Home Haemodialysis* and the *Haemodialysis* fact sheets for more information on these treatment options.

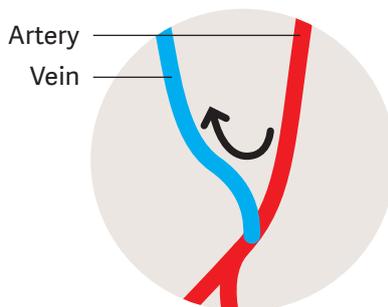


What is vascular access?

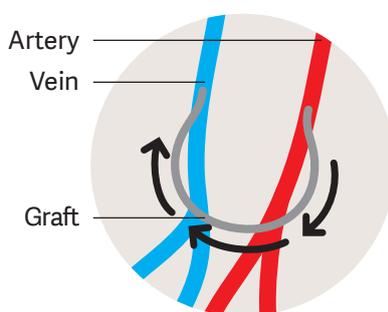
For you to have HD you need to have a 'vascular access' created. This is so your blood can flow into the dialysis machine to be cleaned of the extra fluid and waste products. A surgical procedure is needed to create your vascular access. This surgery is usually done in a hospital as a one-day procedure, so there is no need for you to stay overnight. It can take up to two months until your vascular access is ready to be used for HD.



There are three types of vascular access:



1. Fistula: A fistula is the name for joining an artery to a vein. This is usually in your lower or upper arm or sometimes in your leg. A fistula can last for a very long time, and has the lowest risk of complications. Most people using HD have a fistula.



2. Graft: If your veins are too small or delicate for a fistula to work then vascular access with a graft may be needed. This means a piece of tube is attached between one of your arteries and a vein.



3. Central Venous Catheter: Sometimes it is not possible to create a fistula or a graft. In these cases you will have a central venous catheter. This is a plastic tube that is placed into a large vein in your chest. A catheter can be used straight away. It is sometimes necessary to have a central venous catheter while you are waiting for your fistula to be ready to use.



IMPORTANT

- Whatever vascular access you have, you will need to look after it and make sure that it does not get infected. Your health care team will provide you with tips on how to look after your vascular access.

Supportive care

Supportive care is the treatment choice for kidney disease when you have decided that dialysis and transplant are not right for you. This may be because you are already very frail and you do not want complicated treatments. You may have had dialysis for a while and now want to stop. If you are already frail, having dialysis may not make any difference to the amount of time you have left to live.

Supportive care means that your care continues to be supervised and supported by health professionals. You may have medications and a special diet to improve your quality of life. Supportive care will not extend your life when your kidneys fail completely.

See the *Supportive Care* fact sheet for more information on this treatment option.

What should you do if you decide to have supportive treatment?

The first step is to talk to your family and your health care team. If you all understand each other and work together, you can make sure that you have the best quality of life until your kidneys fail completely.

It is a good idea to make sure that your personal affairs are in order, for example:

- Make sure you have a Will
- Think about having a Medical Power of Attorney
- Think about making an Advanced Care Directive
- Make a list of your financial records including bank accounts, real estate, insurance policies, etc.
- Provide contact details of people who will be helping to settle your estate, e.g. solicitor
- Accountant and the executor of your Will
- Let people know about your choices for funeral services.

What is palliative care?

Palliative care is special medical care that focuses on providing relief from the symptoms and stress of a serious illness. Seeing a palliative care team does not change your lifespan but may increase your quality of life.

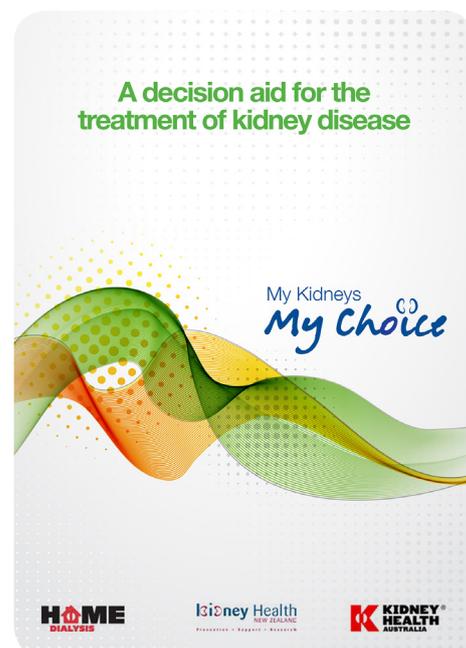
Kidney disease symptoms can include itchy skin, restless legs, and general pain. The palliative care team supports you and your family to live as independently and comfortably as you can. Some people visit a palliative care team for many years, even while on dialysis. For many people, involvement with palliative care also enhances a comfortable end of life.

How do I choose the best kidney disease treatment for me?

Education is the first step to choosing what type of treatment you will have. Take advantage of group and individual education sessions. Use fact sheets and booklets, good quality websites, videos, and consider talking to other people in the same position. Your health care team can offer advice on any possible reasons why a particular treatment may not be possible due to current or previous health issues.

It is best to select a treatment based on your lifestyle, daily schedule, activities and personal preference. Many factors such as your age, where you live, your medical conditions and your support system may also make a difference.

My Kidneys, My Choice is a useful decision aid that will help you to make your choice. It contains a check-list of issues that you should consider when making your choice. The decision aid is available from the Treatment for kidney disease > Choosing your treatment page at www.kidney.org.au





THINGS TO REMEMBER

- Treatment for kidney disease includes kidney transplantation, dialysis, or supportive care.
- Education is the first step to choosing the treatment that is best for you.
- It is best to select a treatment based on your lifestyle, daily schedule, activities, personal preference and medical suitability.

What does that word mean?

Anti-rejection medications -

Medications that control your immune system and reduce the risk of your body rejecting your new kidney.

Automated Peritoneal Dialysis (APD) -

Type of PD where a special fluid is put into the peritoneal cavity through a soft plastic tube, then drained out of your body continuously for a few hours by a machine, usually at night. See also CAPD.

Catheter - A plastic tube that is used to take fluid in or out of your body. (See Vascular access catheter).

Continuous Ambulatory Peritoneal Dialysis (CAPD) -

A type of PD where a special fluid is put into the peritoneal cavity through a soft plastic tube, then drained a few hours later. This is usually done three or four times a day. See also APD.

Dialysis - A treatment for kidney disease that removes waste products and excess fluid from your blood by filtering your blood through a special membrane.

Dialysate/Dialysis Fluid - Special fluid that is used during dialysis to help clean the waste and excess fluid from your blood.

Fistula - Produced when a vein and an artery in the arm or leg are joined together in an operation to make it easier to move blood in and out of your body during haemodialysis.

Graft - Another type of access for haemodialysis that is used if the blood vessels cannot be used for a fistula. During surgery, an artery and a vein are joined together by soft tubing.

Peritoneal cavity - The space in the abdomen (belly) holding the intestines and other organs.

Peritoneal membrane - The membrane that lines your peritoneal cavity and covers organs such as your stomach, liver, spleen, and intestines.

Transplant - A medical operation in which an organ or tissue is removed from the body of one person (the donor) and put it into the body of another person who is very ill (the recipient). Organs that are suitable for donation include kidneys, heart, lungs, liver, intestines and pancreas. Tissues that are suitable for donation include heart valves and tissues, bone and tendons, skin, and eye tissue.

Vascular access catheter - A special tube which is surgically inserted into your neck, collarbone or top of your leg to allow access for haemodialysis. Also called a central venous catheter.

For more information about kidney or urinary health, please contact our free call Kidney Health Information Service (KHIS) on 1800 454 363.

Or visit our website kidney.org.au to access free health literature.

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or health professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.



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