

Kidney Failure Treatment Options



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When your kidneys begin to drop to 15-20% of their normal capacity, your kidney healthcare team will discuss additional treatment choices with you. It's a good idea to plan ahead. That way, you'll have time to prepare, plan, and make sure that you're making the treatment choice that's best for you.

There are three main treatment options:

- dialysis (there are several types)
- kidney transplant
- conservative kidney management (often called conservative care)

Dialysis and kidney transplant are known as *renal replacement therapies* (RRT) because they attempt to “replace” the normal work of the kidneys.

Treatment Options

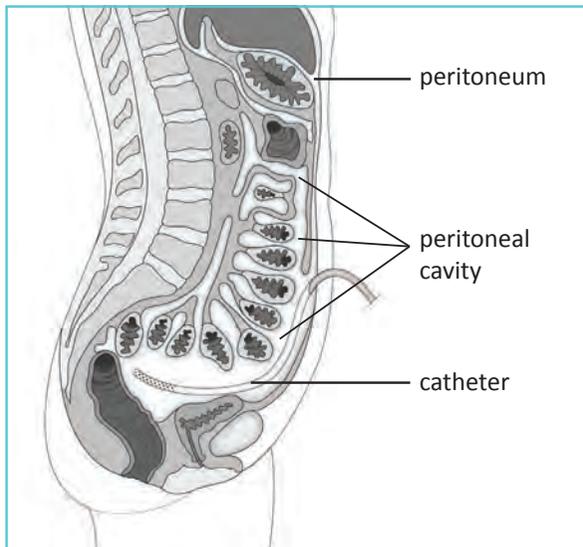
Dialysis

Dialysis is the most common treatment for kidney failure. Dialysis treatment removes waste and excess water from your blood once your kidneys are no longer able to do this. There are two main types of dialysis: *peritoneal dialysis* (PD) and *hemodialysis* (HD).



Peritoneal Dialysis

Peritoneal dialysis can be done at home or at work. The inside of your abdomen (tummy) is called the peritoneal cavity. It is lined with a thin membrane called the peritoneum. This membrane covers the intestines and other internal organs. A soft plastic tube called a catheter (tube) is put into your abdomen. This catheter stays in as long as you are on PD. Dialysis fluid, called dialysate, runs through the catheter into the abdomen. Excess water and wastes from your blood pass through the peritoneum into the dialysis fluid. This fluid is then drained from your body and thrown away. This process is called an “exchange”, and it is how PD “cleans” toxins from the body. The frequency of PD exchanges vary and may be done several times a day or overnight.



PERITONEAL CAVITY

Training for PD takes about one to two weeks before you can do it on your own. You will also get on-going support from the dialysis clinic. With peritoneal dialysis, dialysate fluid is delivered to your home. Most (if not all) costs are covered by your provincial/territorial healthcare plan. You will need to make sure that you are home to receive your supplies and that you have space in your home to store them where they won't freeze or be exposed to heat or humidity. You need a closet about the size of a double bed to store the supplies.

With PD, you'll have more flexibility, independence, and control over your own treatment. People who want to continue working, going to school, or wish to travel (PD supplies can be sent to many parts of the world) often choose peritoneal dialysis. People who would prefer to spend their time at home, rather than travelling to and from treatment, might also choose PD.

Hemodialysis

A hemodialysis machine pumps blood from the body through a filter to remove waste and excess fluid. The cleaned blood is returned to the body. Only a small amount of blood is out of the body at a time. It typically takes several hours to remove fluid and toxins for each session, and usually several sessions are needed every week.

Access to the blood from large veins is needed to do hemodialysis. This access can be a fistula or graft, which is usually in your arm. Fistulas and grafts join an artery and a vein. The stronger blood flow from the



HEMODIALYSIS MACHINE

artery causes the vein to become larger which allows for easier connection to the dialysis machine. Fistulas and grafts must be made weeks to months before they are needed. You will need surgery to make the access. If there isn't time to prepare a fistula or graft, a central venous catheter is used. This is usually temporary where a soft tube is inserted into a large vein in the neck or near the collarbone. Hemodialysis can be done at home or at a dialysis centre.

Hemodialysis at Home

Instead of travelling to a clinic or hospital and having a healthcare provider connect you to a machine, you and/or a caregiver learn how to use the dialysis machine at home. Training for home hemodialysis may take six weeks, but this can vary. After that, you will be able to dialyze at home.

Generally, people feel and do better with independent (home) hemodialysis than with hemodialysis in a hospital or clinic. That's because home hemodialysis can be done more often on your own schedule, and with fewer dietary and fluid restrictions. Many people choose to start hemodialysis before going to bed and receive gentle hemodialysis while they sleep. This removes toxins and fluid very well while freeing up the day for other activities.

You are in charge of your own day-to-day care with ongoing support from your dialysis clinic. You'll need to make sure you have space in your home to store your dialysis supplies and to set up a comfortable, permanent place in your home for your dialysis machine and water system. You may need to install special plumbing connections and electrical outlets for your dialysis machine. The costs of these modifications may be covered by provincial/territorial healthcare plans. This option may increase your home energy, water and/or garbage disposal costs because you are dialyzing at home. Some provinces have utility reimbursement programs or grants. Please check with your local dialysis program to find out what expenses are covered.

Hemodialysis at a Hospital or Clinic

Some people are not able to do dialysis (either PD or hemodialysis) at home and instead go to a hospital or clinic where a nurse or technician can connect them to the dialysis machine. In-centre hemodialysis treatment is usually done three times a week and takes four to five hours each time. You'll have to plan your week and your activities

around your hemodialysis schedule. This type of dialysis usually has the most dietary and fluid restrictions to help your body manage fluid and waste build-up between treatments.

There are reasons that make having hemodialysis in a clinic necessary for some people: for example, if you are physically unable to do dialysis at home, you don't have appropriate housing, and/or if you lack the support needed to do your treatment at home.

Kidney Transplant

A kidney transplant is generally thought to be the best treatment for most people with kidney failure. But a transplant is not suitable for everyone. You may not be able to have a transplant if you have other serious health issues apart from kidney disease.

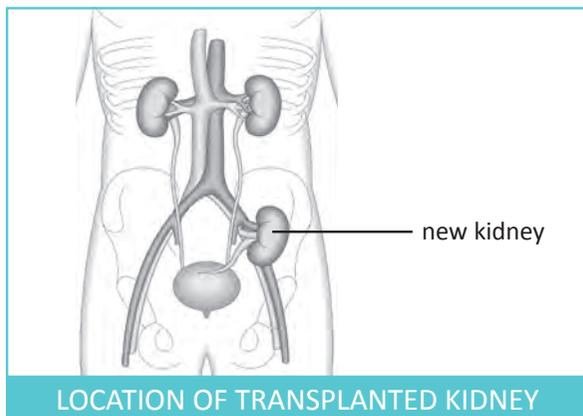
There are two types of organ donation. Deceased donation takes place when organs become available for donation after someone has died. Living donation happens when someone voluntarily donates an organ or part of an organ to a person in need.

Kidney transplantation is a very successful and acceptable treatment. The success rate for a transplant from a living donor is high: 90–95% of these kidneys are working well after one year and they last on average 15 to 20 years. Success rates are improving every year with advances in medical research.

The success rate for a transplant from a deceased donor is high: 85–90% of these kidneys are working well after one year and 74% of Canadians with a kidney transplant still have a functioning kidney after 10 years. Success rates are improving every year with advances in medical research.

Even if you are suited for a transplant, a donor kidney may not be available right away. The need for organs for transplantation is much greater than the available supply. Wait times can range from a few months to several years. Most people start dialysis while they wait for a donor kidney.

The advantages of a transplant include better quality of life with fewer limitations than dialysis. A transplant won't take hours of treatment time out of your week, and you may feel physically stronger, able to work, travel and stay more active. The main disadvantage of a transplant, in addition to the general risks of surgery, is that you will have to take medications every day, which may increase your risk of infection, and have other side effects.



Conservative Kidney Management (Conservative Care)

Conservative kidney management is another option for managing kidney failure. This option focuses on managing symptoms and improving quality of life without the use of dialysis.

For some people, dialysis may not help them live longer or live well. For them, the benefits of dialysis are not there. People who choose conservative kidney management supportive care are not able to have a transplant. Many have multiple illnesses and/or advanced age and dialysis may not be able to extend their lives. They would prefer care that provides them with a good quality of life with few symptoms.

If you choose conservative kidney management, your healthcare team will help you use diet and medication to slow the kidneys' decline, manage any symptoms you may have, and provide support to you and your family as you plan for the end of life when this is needed.

Which Treatment is Best for You?

Choosing a treatment depends on what is most appropriate for your particular needs and circumstances. The Kidney Foundation's handbook *Book Two: Living with Kidney Failure* describes the treatment options in more detail. Ask your healthcare team for a copy of the book.

Note

This information is intended to help you discuss treatment options with your healthcare team. It is not meant to recommend any particular type of medical treatment.



OUR VISION

The Kidney Foundation of Canada is committed to achieving excellent kidney health, optimal quality of life, and a cure for kidney disease.

OUR MISSION

The Kidney Foundation of Canada is the national volunteer organization committed to eliminating the burden of kidney disease through:

- Funding and stimulating innovative research for better treatments and a cure;
- Providing education and support to prevent kidney disease in those at risk and empower those with kidney disease to optimize their health status;
- Advocating for improved access to high quality healthcare;
- Increasing public awareness and commitment to advancing kidney health and organ donation.

For further information, or to help us in our efforts, please contact The Kidney Foundation office in your area. You can also visit our website at kidney.ca.

The Kidney Foundation would like to acknowledge and thank the members of the Kidney Foundation's National Programs & Public Policy committee for their contributions and professional expertise in the development of this resource.

This material is available in accessible formats upon request by contacting info@kidney.ca or calling 1-800-361-7494.