

REVIEWED*By Chris Tighe at 1:25 pm, Aug 07, 2018*

National Kidney Foundation®

A TO Z HEALTH GUIDE

Dialysis

Dialysis is a treatment that does some of the things done by healthy kidneys. It is needed when your own kidneys can no longer take care of your body's needs.

When is dialysis needed?

You need dialysis when you develop end stage kidney failure --usually by the time you lose about 85 to 90 percent of your kidney function and have a GFR of <15. [Click here to learn more about the stages of Chronic Kidney Disease and GFR.](#)

What does dialysis do?

When your kidneys fail, dialysis keeps your body in balance by:

- removing waste, salt and extra water to prevent them from building up in the body
- keeping a safe level of certain chemicals in your blood, such as potassium, sodium and bicarbonate
- helping to control blood pressure

Is kidney failure permanent?

Usually, but not always. Some kinds of acute kidney failure get better after treatment. In some cases of acute kidney failure, dialysis may only be needed for a short time until the kidneys get better.

In chronic or end stage kidney failure, your kidneys do not get better and you will need dialysis for the rest of your life. If your doctor says you are a candidate, you may choose to be placed on a waiting list for a new kidney.

Where is dialysis done?

Dialysis can be done in a hospital, in a dialysis unit that is not part of a hospital, or at home. You and your doctor will decide which place is best, based on your medical condition and your wishes.

Are there different types of dialysis?

Yes, there are two types of dialysis --hemodialysis and peritoneal dialysis.

What is hemodialysis?

In hemodialysis, an artificial kidney (hemodialyzer) is used to remove waste and extra chemicals and fluid from your blood. To get your blood into the artificial kidney, the doctor needs to make an access (entrance) into your blood vessels. This is done by minor surgery to your arm or leg.

Sometimes, an access is made by joining an artery to a vein under your skin to make a bigger blood vessel called a fistula.

However, if your blood vessels are not adequate for a fistula, the doctor may use a soft plastic tube to join an artery and a vein under your skin. This is called a graft.

Occasionally, an access is made by means of a narrow plastic tube, called a catheter, which is inserted into a large vein in your neck. This type of access may be temporary, but is sometimes used for long-term treatment.

[Click here to learn more about hemodialysis](#)

How long do hemodialysis treatments last?

The time needed for your dialysis depends on:

- how well your kidneys work
- how much fluid weight you gain between treatments
- how much waste you have in your body
- how big you are
- the type of artificial kidney used

Usually, each hemodialysis treatment lasts about four hours and is done three times per week.

A type of hemodialysis called high-flux dialysis may take less time. You can speak to your doctor to see if this is an appropriate treatment for you.

What is peritoneal dialysis and how does it work?

In this type of dialysis, your blood is cleaned inside your body. The doctor will do surgery to place a plastic tube called a catheter into your abdomen (belly) to make an access. During the treatment, your abdominal area (called the peritoneal cavity) is slowly filled with dialysate through the catheter. The blood stays in the arteries and veins that line your peritoneal cavity. Extra fluid and waste products are drawn out of your blood and into the dialysate. There are two major kinds of peritoneal dialysis.

[Click here to learn more about peritoneal dialysis](#)

What are the different kinds of peritoneal dialysis and how do they work?

There are several kinds of peritoneal dialysis but two major ones are:

Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD).

Continuous Ambulatory Peritoneal Dialysis (CAPD) is the only type of peritoneal dialysis that is done without machines. You do this yourself, usually four or five times a day at home and/or at work. You put a bag of dialysate (about two quarts) into your peritoneal cavity through the catheter. The dialysate stays there for about four or five hours before it is drained back into the bag and thrown away. This is called an exchange. You use a new bag of dialysate each time you do an exchange. While the dialysate is in your peritoneal cavity, you can go about your usual activities at work, at school or at home.

Automated Peritoneal Dialysis (APD) usually is done at home using a special machine called a cycler. This is similar to CAPD except that a number of cycles (exchanges) occur. Each cycle usually lasts 1-1/2 hours and exchanges are done throughout the night while you sleep.

Will dialysis help cure the kidney disease?

No. Dialysis does some of the work of healthy kidneys, but it does not cure your kidney disease. You will need to have dialysis treatments for your whole life unless you are able to get a kidney transplant.

Is dialysis uncomfortable?

You may have some discomfort when the needles are put into your fistula or graft, but most patients have no other problems. The dialysis treatment itself is painless. However, some patients may have a drop in their blood pressure. If this happens, you may feel sick to your stomach, vomit, have a headache or cramps. With frequent treatments, those problems usually go away.

How long has dialysis been available?

Hemodialysis and peritoneal dialysis have been done since the mid 1940's. Dialysis, as a regular treatment, was begun in 1960 and is now a standard treatment all around the world. CAPD began in 1976. Thousands of patients have been helped by these treatments.

How long can you live on dialysis?

If your kidneys have failed, you will need to have dialysis treatments for your whole life unless you are able to get a kidney transplant. Life expectancy on dialysis can vary depending on your other medical conditions and how well you follow your treatment plan. Average life expectancy on dialysis is 5-10 years, however, many patients have lived well on dialysis for 20 or even 30 years. Talk to your healthcare team about how to take care of yourself and stay healthy on dialysis.

Is dialysis expensive?

Yes. Dialysis costs a lot of money. However, the federal government pays 80 percent of all dialysis costs for most patients. Private health insurance or state Medicaid programs also help with the costs.

[Click here to learn more about insurance options](#)

Do dialysis patients feel normal?

Many patients live normal lives except for the time needed for treatments. Dialysis usually makes you feel better because it helps many of the problems caused by kidney failure. You and your family will need time to get used to dialysis.

Do dialysis patients have to control their diets?

Yes. You may be on a special diet. You may not be able to eat everything you like, and you may need to limit how much you drink. Your diet may vary according to the type of dialysis.

[Click here to learn more about diet for dialysis patients](#)

Can dialysis patients travel?

Yes. Dialysis centers are located in every part of the United States and in many foreign countries. The treatment is standardized. You must make an appointment for dialysis treatments at another center before you go. The staff at your center may help you make the appointment.

[Click here to learn more about traveling on dialysis](#)

Can dialysis patients continue to work?

Many dialysis patients can go back to work after they have gotten used to dialysis. If your job has a lot of physical labor (heavy lifting, digging, etc.), you may need to get a different job.

[Click here to learn more about working with kidney disease](#)

If you would like more information, please [contact us](#).

© 2015 National Kidney Foundation. All rights reserved. This material does not constitute medical advice. It is intended for informational purposes only. Please consult a physician for specific treatment recommendations.

The information shared on our websites is information developed solely from internal experts on the subject matter, including medical advisory boards, who have developed guidelines for our patient content. This material does not constitute medical advice. It is intended for informational purposes only. No one associated with the National Kidney Foundation will answer medical questions via e-mail. Please consult a physician for specific treatment recommendations.

 TWEET

 SHARE

 PRINT

 EMAIL