



Patient & Family Guide

2023

# Acute Hemodialysis



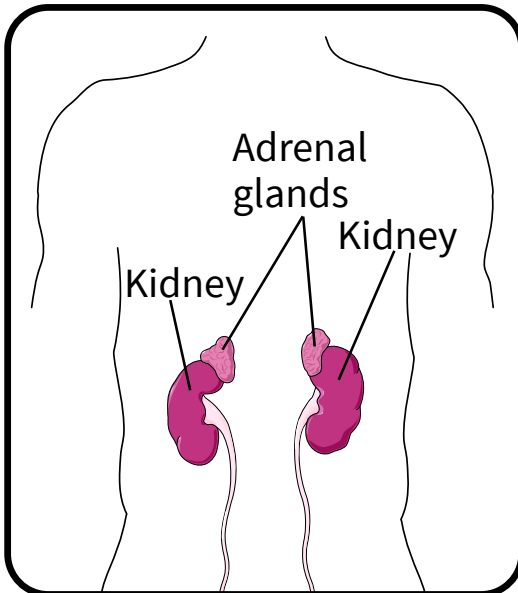
[www.nshealth.ca](http://www.nshealth.ca)

# Acute Hemodialysis

## What do the kidneys do?

Your kidneys filter (remove) waste from your blood. They also:

- › make hormones that affect your blood pressure, calcium levels, and red blood cells.
- › balance the amount of water in your body by removing extra water or keeping water as needed.
- › balance the electrolyte and mineral levels in your body.



## **What is acute kidney failure?**

- Acute kidney failure is when your kidneys stop working suddenly (very fast and with no warning).
- Shock, trauma, accidents, medications, blockages, heart problems, infections, and other health problems can cause kidney failure.
- When your kidneys are damaged, they stop filtering your blood. This may be reversible over time, but there is no guarantee.

## **What are the symptoms of acute kidney failure?**

- If your kidneys stop working suddenly, waste products and water will build up in your blood. You may have some or all of these symptoms:
  - › Feeling very tired
  - › Weakness
  - › Nausea (feeling sick to your stomach)
  - › Vomiting (throwing up)
  - › Low appetite (not wanting to eat)
  - › Bad taste in your mouth
  - › Itchy skin
  - › Trouble sleeping
  - › Trouble remembering

- › Shortness of breath
- › Swelling in your hands, arms, legs, or feet (and in other areas of your body)
- Waste buildup in your blood may also cause:
  - › Changes in your blood pressure
  - › Abnormal blood work results like higher electrolytes (potassium, calcium, magnesium, phosphorus, sodium), lower red blood cells, higher waste products (like urea and creatinine)

## **What is peritoneal dialysis?**

- Peritoneal dialysis is a way to filter your blood and remove fluid from your body. A surgeon inserts a tube with a special fluid into your abdomen (belly).
- This type of dialysis can be done at home. It takes time to organize and arrange. The catheter site must be healed first. There is special training you need to do before you go home.
- When your kidneys stop working suddenly, you may be too sick to learn how to do this dialysis and not have enough strength to do it.

## What is hemodialysis?

- Hemodialysis is a treatment that uses a machine to:
  - › filter your blood and remove waste and extra water from your blood.
- Your nephrologist (kidney doctor) will write a dialysis prescription for your treatment. This prescription is based on your blood work results and the fluid buildup in your body.
- During each treatment, dialysis nurses give you your treatment in either:
  - › Your room (ICU only)
  - › A hospital unit (you will be taken to this unit while you are in your bed)
- During the treatment, your blood leaves your body and goes into a dialysis machine. It goes through a filter called a dialyzer. The dialyzer cleans your blood and returns it to your body.
- Your doctor will insert a special line (called a hemodialysis catheter) into your bloodstream to do each treatment (see page 6).
- You may also need to take certain medications (like supplements, pills, blood pressure medications) to help get your blood back to normal.

## **How long will I be on hemodialysis?**

- It is hard to know how long you will need dialysis. This depends on whether your kidneys heal or not. Your kidney function will be monitored by your health care team. If you need dialysis for longer, you can still go home and come to the Dialysis Unit for treatments.
- Dialysis treatments are usually 3 times a week. It takes about 4 to 5 hours each time. This may be different for everyone. The health care team will check your blood pressure, pulse, and temperature. You will be weighed before and after each treatment.
- If your kidneys do not heal, toxins and fluid will build up in your blood. You will need dialysis to remove these from your blood.

## **How often will I need hemodialysis?**

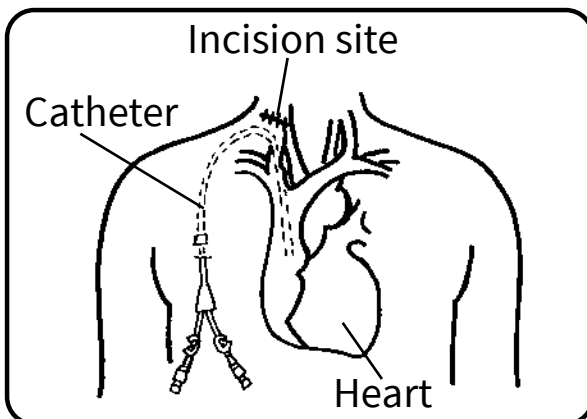
- When your kidneys stop working, waste products can build up in your blood quickly. You may need hemodialysis 3 times a week or more.

## **What will happen at my hemodialysis appointments?**

- You will have blood work done. Your health care team will decide your dialysis needs based on your blood work results.
- Each treatment will last about 4 to 5 hours.

## What are hemodialysis catheters?

- Your health care team will use **catheters** (thin, hollow tubes) to move blood in and out of your body.
- Your doctor will put a catheter into a large vein in your neck or chest. If these veins cannot be used, they will put the catheter into a large vein in your leg.
- You will have 2 stitches in your neck or groin to hold the catheter in place.
- You will see a tube coming from the spot on your neck, chest, or leg. This tube splits into 2 other tubes, making a “Y” shape.
- These tubes connect your catheter to the dialysis machine:
  - › One tube moves blood from your body to the dialysis machine, where it is cleaned and filtered. This tube also removes extra water from your blood, if needed.
  - › The other tube brings the filtered blood back to your body.



- The catheter tubes are covered with a waterproof dressing. This is to prevent:
  - › infections.
  - › the catheter from being pulled on.
- There are 2 types of catheters used in hemodialysis treatment:
  - › **Non-tunneled** catheters are for used for shorter periods of time. They can be inserted (put in) by a doctor while you are in your bed. You will need an X-ray once it has been inserted.
  - › **Tunneled** catheters are put in by a radiologist (a doctor who specializes in reading medical images like X-rays and ultrasounds) in the Interventional Radiology Department. You will be taken there in your bed or by wheelchair. A tunneled catheter can be safely used for weeks or months.



## Living with kidney disease

- Hemodialysis can be hard for you and your loved one(s). During your treatment, you may:
  - › have to change what you eat and drink, or follow an eating plan.
  - › start or stop certain activities.
  - › feel helpless, angry, or not sure of what to do.
  - › need to take a new medication(s).
- You may need time to get used to the physical and mental changes that may happen with hemodialysis treatment. This is common.
- Your health care team is here to help and support you as you start your treatment. Your team includes:
  - › Nurses
  - › Nephrologists
  - › Social workers
  - › Dietitians
  - › Peer support volunteers
  - › Spiritual care workers
- Please talk to a member of your health care team if you have any questions or concerns.

## Resources

- **The Kidney Foundation of Canada:**
  - › <https://kidney.ca/>
- **Living with Reduced Kidney Function:**
  - › <https://kidney.ca/Support/Resources/Living-with-Reduced-Kidney-Function-6th-edition>
  - › <https://kidney.ca/Kidney-Health/Living-With-Kidney-Failure>
- If you would like a paper copy of these guides, ask your nurse.

- If you or your loved one(s) would like more information on dialysis options (like peritoneal dialysis), the modality selection nurse can help.
  - › Phone: 902-473-7578
- Please leave a message with your name and phone number and the nurse will return your call.

