All about kidney disease

The kidneys
Your kidneys are vital organs. You need them to live, just like you need your heart and lungs. They filter waste and extra fluid out of your blood to make urine. Your kidneys also do other important jobs including:

- Control chemicals and fluid in your body.
- Help control your blood pressure.
- Help keep your bones healthy.
- Help your body make red blood cells.

Most people have two kidneys. Each kidney is located near the middle of your back, one on each side of your spine. Each kidney is connected to your bladder by a thin tube called a ureter.

Chronic kidney disease (CKD)

- CKD means you have lasting damage to your kidneys that may get worse over time.
- It is most often caused by diabetes or high blood pressure.
- CKD may be preventable. Finding and treating CKD early may delay or even prevent kidney failure.

Healthy kidney
Blood enters the kidney
Blood goes through the kidney filters and waste is carried out through urine
Filtered blood exits the kidney

Damaged kidney
Blood enters the kidney
Damaged kidneys do not filter out waste from the blood as they should
Waste stays in the body instead of being carried out through urine

You are at higher risk for CKD if you:

- Have diabetes
- Have high blood pressure
- Have heart disease
- Have a family member with kidney disease
- Are African-American, Hispanic, Native American, or Asian Pacific Islander
- Are over 60 years old
**Signs of advanced kidney disease**

CKD usually gets worse slowly. Most people have no symptoms until the kidneys are badly damaged. If your kidneys are beginning to fail, you may notice any of the following symptoms:

- Itchy skin
- Muscle cramps
- Nausea and vomiting
- Not feeling hungry
- Swelling in your feet and ankles
- Too much or not enough urine (pee)
- Trouble catching your breath
- Trouble sleeping

**Tests for kidney disease**

**eGFR test**

- A blood test that shows how well your kidneys are working.
- Your eGFR is a number based on your age, gender, race/ethnicity, and how much creatinine (a natural waste product) is in your blood.
- You might have kidney disease if your eGFR is less than 60 for three months or more.

**Urine test**

- A test to look for blood or protein (albumin) in your urine.
- Blood or protein in your urine can be an early sign of kidney disease.
- There are usually no visible signs of blood or protein in your urine unless your kidney damage is very bad.

**Preventing kidney disease**

- Diabetes and high blood pressure are the most common causes of kidney disease. If you have either of these conditions, talk to your doctor about how to control your blood sugar or blood pressure.
- Live a healthy lifestyle:
  - Follow a low-fat, low-salt diet
  - Set a goal to exercise for 30 minutes a day, 5 days per week
  - Have regular checkups with your doctor
  - Do not smoke or use tobacco
  - Limit alcohol
  - Keep a healthy weight

**Kidney failure**

- Kidney failure happens when the damage to your kidneys is very bad and your kidneys stop working.
- It is also known as ESRD (end-stage renal disease).
- ESRD has no cure, and you will need dialysis or a kidney transplant to live.

For more information about chronic kidney disease, visit: KidneyFund.org/ckd