

The basics of chronic kidney disease

Chronic kidney disease (CKD) is a condition that happens when your kidneys don't remove waste, toxins, and extra fluids from your body. Kidney disease develops in five stages.

Diagnosing CKD

Your doctor will use two tests to diagnose and determine your stage of CKD:



A blood creatinine test to estimate your glomerular filtration rate (eGFR). Creatinine is a waste product your body makes that would normally be removed by the kidneys. If your kidneys no longer function well, your creatinine levels go up.



A urine test for albumin or protein, called albumin-to-creatinine ratio (ACR) or protein-to-creatinine ratio (PCR). When your kidneys are damaged, albumin and protein can spill into your urine at abnormally high levels.

Lower eGFR numbers mean your kidneys are not working as well as they should be. Your eGFR can determine your stage of CKD:

- Stage 1 - Normal kidney function or mild CKD (eGFR > 90)
- Stage 2 - Mild CKD (eGFR = 60-89)
- Stage 3a - Mild to moderate CKD (eGFR = 45-59)
- Stage 3b - Moderate to severe CKD (eGFR = 30-44)
- Stage 4 - Severe CKD (eGFR = 15-29)
- Stage 5 - Kidney failure or end stage kidney disease (eGFR <15)

ACR and/or PCR levels can be grouped into 3 different categories:

- A1, or normal (ACR less than 30 mg/g)
- A2, moderately increased (ACR 30-299 mg/g)
- A3, severely increased (ACR 300 mg/g or higher)

Taken together, your eGFR and your ACR level help determine your stage and risk of your kidney disease worsening, called “progression.”

Symptoms of CKD

You might not feel the symptoms of CKD until stage 4 or even 5. Some common symptoms are:

- Loss of energy
- Swelling in the legs
- Shortness of breath from fluid buildup in the lungs
- Leg cramps
- Sleep problems
- Pain in your bones
- Loss of appetite
- Dry, itchy skin
- Nausea and/or vomiting

Causes of CKD

While it's not always possible to know the cause of CKD, these are some common causes:

- High blood pressure (hypertension)
- High blood sugar (diabetes)
- Autoimmune diseases (when your own immune system attacks your body) such as lupus
- Inherited kidney cysts (e.g., polycystic kidney disease or PKD)
- Blockages of urine flow
- Side effects of certain long-term medications



Treating CKD

There are some causes of CKD that can be treated, which can help improve your kidney function. However, “curing” CKD is not common in most cases. Even though there is no cure, there are ways you can slow down the progression, prevent complications, and keep feeling your best.



Heart health

People with CKD have a higher risk for heart failure, stroke, heart attacks, and other heart conditions. It is important that you focus on controlling your blood pressure and reducing your cholesterol to keep your heart healthy.



Diabetes

If you have CKD and diabetes, it's important to stay in control of and care for your diabetes and kidneys so you can stay your healthiest.



Medications

Your doctor may prescribe specific medications to help slow down the progression of your CKD.



Nutrition and Fluid Intake

What you eat and drink can help you feel your best and stay healthy. In later stages of CKD, you may need to adjust your diet to help manage potassium, acid, and phosphorus levels in your blood. In some cases, your care team may also recommend adjusting your protein intake to help slow the progression of your CKD. If you have swelling and/or high blood pressure, your care team may also recommend reducing your sodium intake and/or limiting your fluid intake.



Lifestyle choices

Making healthy lifestyle choices like stopping smoking, exercising regularly, losing weight if needed, and managing stress can also help you feel your best. Stopping smoking and losing weight can also help slow CKD progression.



Anemia

Anemia can be a common side effect of later stages of CKD, which makes it hard for your body to make red blood cells. Your care team can help you find ways to boost your levels of red blood cells.



We are here to help

Your care team can help answer your questions about CKD. Reach out for any support you need!