

## Frequently Asked Questions (FAQs)

### What is dialysis?

Dialysis is a life-sustaining process that cleans waste products from the blood and removes extra fluids when a person's kidneys fail. Dialysis patients typically require treatment on an ongoing basis unless they receive a kidney transplant.

### **How often is treatment needed?**

Typically, in-center hemodialysis is conducted during the day, three times a week for three to five hours per session.

### Who requires dialysis?

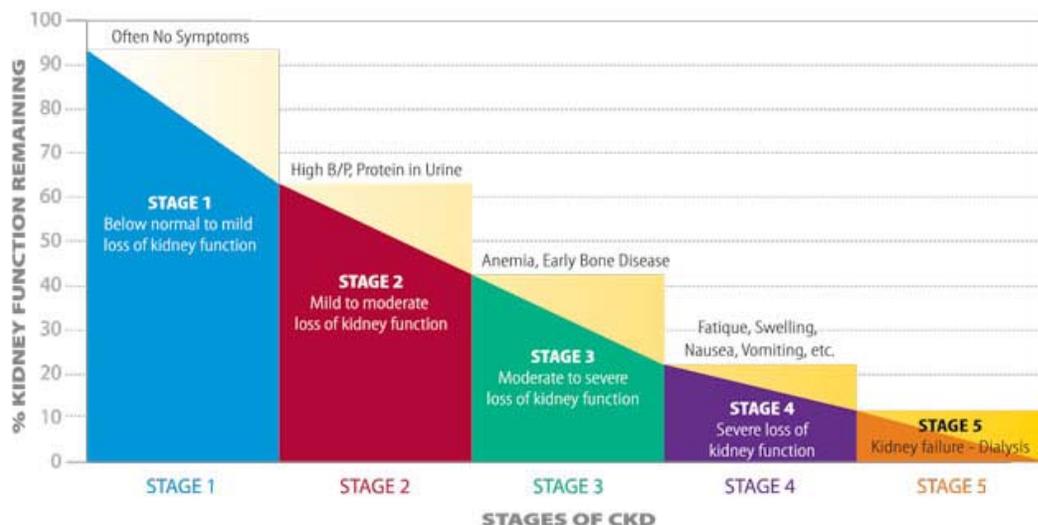
Those whose kidneys have failed, a condition also known as end-stage renal disease (ESRD), require dialysis or a kidney transplant to live.

### What is chronic kidney disease (CKD)?

Chronic kidney disease (CKD) is a progressive, usually permanent, loss of kidney function that can take place over a period of months or years.

### What is end-stage renal disease (ESRD)?

According to the National Kidney Foundation's Kidney Disease Outcomes Quality Initiatives (NKF KDOQI), there are five stages of CKD. Stage 1 is the mildest form, with the least loss of kidney function. Stage 5 is at or near kidney failure, or end-stage renal disease (ESRD). Those reaching this stage need dialysis or a kidney transplant to live. (See chart)



### **How are kidney function and disease stage measured?**

[Glomerular filtration rate \(GFR\)](#) is the best test to measure patients' kidney function and determine their stage of kidney disease. Doctors can calculate patients' GFR levels from their blood creatinine test results, age, race, gender and other factors.

The earlier kidney disease is detected, the better the chance of slowing or stopping its progression.

### **[What causes kidney failure?](#)**

Diabetes and high blood pressure are the two main causes of CKD. Other causes include glomerulonephritis, an inflammation of the kidneys' blood-filtering nephron tubes; inherited diseases such as polycystic kidney disease and some birth defects, lupus, malformed kidneys, immune diseases, kidney stones and repeated urinary tract infections.

All these conditions damage the kidneys' nephrons so they cannot do their job as filters. This leads to a buildup of wastes and extra fluid in the blood, which makes people sick. The kidneys also lose their ability to produce hormones that assist in making red blood cells, controlling blood pressure and maintaining healthy bones.

### **[What risk factors increase the likelihood of kidney disease?](#)**

- Uncontrolled high blood pressure
- Diabetes
- A family history of CKD
- Aging
- Premature birth
- Being African, Hispanic, Asian, or American Indian
- Smoking
- Blockages in your kidneys or ureters – these can be treated by family doctors
- Overuse of over-the-counter pain relievers containing aspirin, ibuprofen, naproxen or acetaminophen. Patients should talk to their doctors if they take pain relievers every day, or even a few times per week
- Taking street drugs
- Taking prescription drugs that patients are allergic to. Patients are advised to know about their drug allergies and promptly tell their doctors about any symptoms they have after starting a new drug.

### **[What are the signs or symptoms of CKD?](#)**

People experiencing any of the symptoms below should talk to a doctor to find out if they are at risk for CKD. Symptoms should only be interpreted in consultation with a medical professional.

Signs and symptoms include:

- Anemia
- High blood pressure
- Bone disease
- Muscle cramps
- Itching
- Blood and/or protein in the urine
- More frequent urination, particularly at night; difficult or painful urination
- Puffiness around eyes, swollen hands and feet



**What percentage of dialysis patients receive a [kidney transplant](#)?**

Approximately 21 percent; more than 90,000 patients in the U.S. are on the waiting list for kidney transplants, but each year only about 18,000 receive new kidneys.