

chronic kidney disease

THE SILENT DISEASE



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What Is Chronic Kidney Disease?

Your kidneys filter blood to remove chemical and mineral waste. When you have permanent damage to the kidneys, it is called chronic kidney disease (CKD). Diabetes and high blood pressure are the most common causes of damage to the kidneys.

Early kidney damage may have no symptoms. In fact, most people with early kidney damage do not have any change in their urine and do not have pain.

Blood tests are used to diagnose chronic kidney disease. Glomerular filtration rate (GFR) is a routine blood test that your physician or nephrologist (kidney specialist) uses to measure the percent of kidney function you have. The normal GFR for healthy adults is 90 milliliters/minute or above. This number is for both kidneys. If your GFR stays below 60 milliliters/minute for three months in a row, it means you have CKD.

In early kidney disease, CKD is diagnosed if there are other signs of damage to the kidneys. Protein (albumin) in the urine is one of those signs. Protein leaks into the urine if filters in the kidney are damaged. A routine urine test is used to check for protein. The level of protein in the urine should be below 30. If several urine tests show levels higher than 30, then there is CKD. This is true even if the GFR is normal or only slightly low.

Lab Tests

Explanation	Lab Test Name	Normal
Kidney filtration (approximate %)	GFR estimate	Above 90
Protein leaking into urine (less is better)	Urine (micro) albumin	Below 30

Stages of Kidney Disease

Stages 1 and 2: Mild Kidney Disease

In both stages 1 and 2, tests such as urine analysis, X-ray, or kidney biopsy are used to find out if there is kidney damage. In stage 1, the GFR is 90 or above; in stage 2, the GFR is between 60 and 89.

Stage 3: Moderate Kidney Disease

In stage 3, the GFR is between 30 and 59.

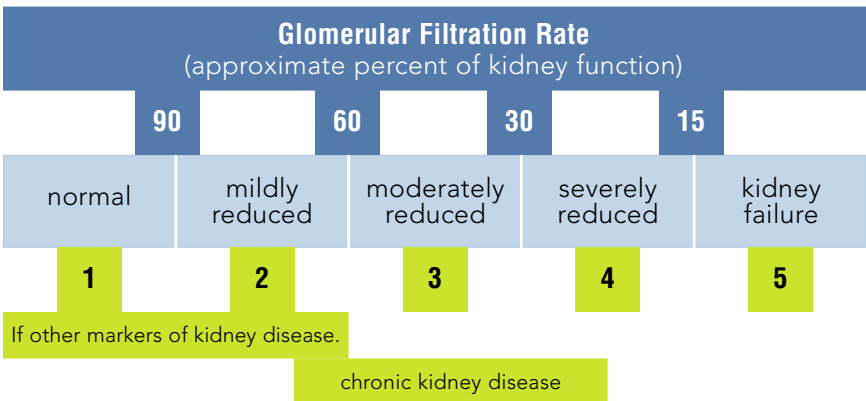
Stage 4: Severe Kidney Disease

In stage 4, the GFR is between 15 and 29. Most people in this stage should be preparing for dialysis and/or transplantation.

Stage 5: End-Stage Kidney Disease or Kidney Failure

In stage 5, the GFR is less than 15. At this stage, kidney disease is often called end-stage kidney disease or end-stage renal disease (ESRD). End stage means your kidneys cannot filter chemicals and minerals out of your blood. It does not mean you are dying. People with a GFR that stays less than 10 to 15 will need to have dialysis or a kidney transplant. Dialysis treatments filter waste chemicals and excess minerals and fluid out of your blood.

Where are you on the kidney filtering spectrum?



Treatments

The treatments for CKD are intended to slow down the damage done to your kidneys by diabetes, high blood pressure, and other diseases. Treating your disease may also slow or prevent damage to your heart and blood vessels.

To slow damage to your kidneys:

- Control your blood pressure by taking prescribed medications
- Take lisinopril (Prinivil) or losartan (Cozaar) if you have protein in your urine
- Control your blood sugar and cholesterol
- Follow your diet and maintain a healthy weight
- Get regular physical activity
- If you are a smoker, quit. Call the Kaiser Permanente Smoker's Helpline at 1-888-883-STOP (7867) for help quitting
- Learn more about CKD. Ask about kidney classes in your area

The most important thing you can do to protect your kidneys is to keep your blood pressure under control. People with CKD should have a blood pressure less than 130 for the top number and less than 80 for the bottom number.

If you have stage 4 or 5 CKD, do everything mentioned above to slow kidney damage. You should also follow instructions to prepare for dialysis and/or transplantation by:

- Keeping regular appointments with your kidney specialist
- Learning more about the types of dialysis and transplantation

Frequently Asked Questions

I was told that my kidneys have only 30 to 60 percent of function left.

Why don't I feel sick? The kidneys are amazing. Even when they are damaged, they manage to do enough to keep you feeling well. This is why CKD is called a silent disease.

I have been told my kidneys only have 15 to 30 percent of function left.

Why don't I feel sick? Kidney function usually goes down slowly. You probably don't remember how you felt before your kidney damage got this far. With 15 to 30 percent function, most people feel more tired and have less strength than when they had more kidney function.

My kidney function is less than 15 percent. Will I have to start dialysis treatments?

Most people will need to start dialysis treatments when kidney function is this low. Your kidneys are no longer able to filter enough poisons to keep you healthy. No one can stay alive for very long with kidney function less than 10 percent.

I don't have pain. How can I have kidney disease? The diseases that most commonly cause permanent damage to the kidneys are diabetes and high blood pressure. These diseases usually do not cause pain. Most back pain is not caused by the kidneys. Kidney pain is most often caused by diseases that block the flow of urine, create cysts, or cause stones to form.

I produce a good amount of urine. How can I have kidney disease? Most people who have kidney disease, including those who are about to start dialysis, can make a normal amount of urine. Because of damage, the kidneys are not able to filter enough of the poisons from the blood into the urine. That means even if there is a good amount of urine, it is poor quality.

Is there anything I can do to improve my kidney function? Chronic kidney disease is different from damage that happens to the kidneys quickly. Sudden damage to the kidneys sometimes improves just as

quickly as it happens. Chronic kidney disease usually does not improve. Sometimes there can be small changes in the level of kidney function. Most of the time, however, your function remains in the same stage. People without kidney disease lose some kidney function with age; people with kidney disease will have more loss with age.

Are both my kidneys damaged? If you have one normal kidney, you do not have kidney disease. Diseases such as diabetes, high blood pressure, lupus, polycystic kidney disease, glomerulonephritis, and scleroderma damage both kidneys.

Will drinking more water or fluids help my kidneys? Drinking extra water or fluids does not help improve chronic kidney disease. Extra fluids may be recommended if you have kidney stones. Drink if you are thirsty.

Why should I care about my kidney disease if it can't be cured? There are two important reasons to care about your kidney disease. First, there are things that can be done to slow down damage to the kidneys. Second, there are ways to stay healthy even though your kidneys are not working well.

What can I do to slow the loss of kidney function and stay healthy even if my kidney function is going down?

- Take an active part in managing your health care
- Control high blood pressure
- Control your blood sugar if you have diabetes
- Stop smoking
- Control your cholesterol
- Use medications that slow kidney disease
- Avoid medications that cause kidney damage
- Take medications for anemia (low red blood count), if needed
- Follow your recommended diet
- Be active; get regular exercise
- Lose weight if you are overweight

