

## How Do I Know If I Have Kidney Damage?

Most people with early kidney damage do not have symptoms. The best way to find early kidney damage is to have a urine test once a year. This test checks for very small amounts of protein in the urine called *microalbuminuria*. It helps show kidney damage at an early stage in people with diabetes.

Not everyone with kidney disease gets kidney disease form getting worse.

## If I have kidney damage, what can be done?

First, your doctor needs to find out how well your kidneys are working. This will help in determining the best treatment for you. Your doctor will start by:

- **Determining your GFR (glomerular filtration rate)**

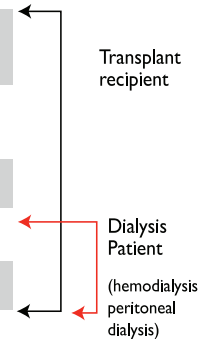
GFR is the best way to find out how well your kidneys are working. Your doctor will begin by testing your blood for a waste product called *creatinine*. When the kidneys are damaged, they have trouble removing creatinine from your blood. Creatinine is stored in muscle tissue and blood. The blood test for creatinine will help your doctor find out how well your kidneys are working. But it is only the first step.

Next, your doctor or lab will take the result of this test and put it into a math formula that includes your age, race, and sex. The number that results from this math formula is called your *GFR (glomerular filtration rate)*. It tells your doctor how well your kidneys are working. You should have this test at least once a year.

Once your GFR is known your doctor can tell which stage of kidney disease you have. There are five stages of kidney disease (see the chart to the right). Your treatment will depend on your stage of kidney disease.

Stages of Kidney Disease		
Stage	Description	Glomerular Filtration Rate (GFR)*
1	Kidney damage (e.g., protein in the urine) with normal GFR	90 or above
2	Kidney damage with mild decrease in GFR	60 to 89
3	Moderate decrease in GFR	30 to 59
4	Severe reduction in GFR	15 to 29
5	Kidney failure	Less than 15

\*Your GFR number tells your doctor how much kidney function you have. As chronic kidney disease progresses, your GFR number decreases.



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- **Ordering a kidney biopsy if needed**

Your doctor may also order a kidney biopsy. This can help your doctor find the underlying cause of your kidney disease. Not all kidney damage is caused by diabetes. Other diseases can be involved. If your kidney disease is caused by diabetes, it is called *diabetic kidney disease (DKD)*.

Your doctor will begin treatment based on the stage of kidney disease you have and what caused it. With the right treatment, you and your doctor can keep your kidneys working as long as possible.