



Kidney disease is a major public health concern. In the early stages, people may not have any symptoms so kidney disease often goes undetected until it is very advanced. When this happens, dialysis or a kidney transplant is needed to survive.

It's best to find out if you have kidney disease when it's still in early stages. Early detection and treatment can slow or stop chronic kidney disease.

Follow these 6 steps to learn more about kidney disease, your risk, and how to prevent it.

STEP 1: Know These Facts

6 THINGS HEALTHY KIDNEYS DO:

- Regulate the body's fluid levels
- Filter wastes and toxins from the blood
- Release a hormone that regulates blood pressure
- Activate vitamin D to maintain healthy bones
- Release the hormone that directs production of red blood cells
- Keep blood minerals in balance (sodium, phosphorus, potassium)

7 PROBLEMS KIDNEY DISEASE CAN CAUSE:

- Heart disease
- Heart attack and stroke
- High blood pressure
- Weak bones
- Nerve damage (neuropathy)
- Kidney failure (end-stage kidney disease, or ESRD)
- Anemia or low red blood cell count

STEP 2: Assess Your Risk

5 MAIN RISK FACTORS:

- Diabetes (you or your family)
- High blood pressure (you or your family)
- Heart disease (you or your family)
- Family history of kidney failure, diabetes, or high blood pressure
- Obesity

ADDITIONAL RISK FACTORS:

- Age 60 or older
- Low birth weight
- Taking over-the-counter nonsteroid antiinflammatory drugs (NSAIDs) such as aspirin (eg, Bayer®, Bufferin®), ibuprofen (eg, Advil®, Motrin®), and naproxen (eg, Aleve®)
- Lupus, other autoimmune disorders
- Chronic urinary tract infections
- Kidney stones

Knowing if you are at risk for kidney disease is important. We've made it easier than ever to know where you stand.

STEP 3: Recognize Symptoms

8 POSSIBLE TROUBLE SIGNS:

Most people with early kidney disease have no symptoms, which is why early detection is critical. By the time symptoms appear, kidney disease may already be advanced. Pay attention to these signs of kidney disease:

- Fatigue, weakness
- Difficult, painful urination
- Foamy urine
- Pink, dark urine (blood in urine)
- Increased thirst
- Increased need to urinate (especially at night)
- Puffy eyes
- Swollen face, hands, abdomen, ankles, feet

STEP 4: Get 4 Easy Tests

TYPE OF TEST	WHY IT'S IMPORTANT	TARGET GOAL
Blood Pressure	High blood pressure can damage small blood vessels (glomeruli) in the kidneys. It is the second-leading cause of kidney failure after diabetes.	<ul style="list-style-type: none"> • Good — 140/90 or lower • Better — 130/80 or lower • Best — 120/80 or lower <p>Check with your healthcare team to see if your blood pressure is at the right level for you.</p>
A1C (hemoglobin A1C)	A blood test that measures the percentage of glucose, or sugar, that's in your blood. The test is used to diagnose prediabetes and diabetes.	<ul style="list-style-type: none"> • Normal — 5.7% or lower • Prediabetes — Between 5.7% and 6.4% • Diabetes — 6.5% or over
ACR (albumin-to-creatinine ratio)	Traces of a type of protein called albumin in the urine (albuminuria) may be an early sign of kidney disease. Increased amounts of albumin and other proteins in the urine (proteinuria) indicate kidney damage.	Under 30 mg of albumin per gram of urinary creatinine (a normal waste product)
eGFR (estimated glomerular filtration rate)	Test is used to measure how well the kidneys are working by checking creatinine levels in blood and using a calculation to find out your glomerular filtration rate (GFR).	<ul style="list-style-type: none"> • Over 90 is good • 60-89 should be monitored • Less than 60 for 3 months indicates kidney disease

STEP 5: Stay Healthy

6 THINGS PEOPLE WITH KIDNEY DISEASE SHOULD DO:

- Lower high blood pressure
- Manage blood sugar levels
- Reduce salt intake
- Avoid over-the-counter nonsteroid antiinflammatory drugs (NSAIDs) such as aspirin (eg, Bayer®, Bufferin®), ibuprofen (eg, Advil®, Motrin®), and naproxen (eg, Aleve®)
- Moderate protein consumption
- Get an annual flu shot

9 THINGS EVERYONE SHOULD DO:

- Exercise regularly
- Control weight
- Follow a well-balanced diet
- Quit smoking
- Drink only in moderation
- Stay hydrated
- Monitor cholesterol levels
- Get an annual physical and kidney tests
- Know your family medical history

STEP 6: Learn More

RESOURCES:

- National Kidney Foundation. [kidney.org](https://www.kidney.org)
- Are you at risk for kidney disease? Take the Kidney Risk Quiz. [MinuteForYourKidneys.org](https://www.kidney.org/learn/kidney-disease/kidney-risk-quiz)
- Centers for Disease Control and Prevention (CDC) Chronic Kidney Disease Basics. [cdc.gov/kidneydisease/basics](https://www.cdc.gov/kidneydisease/basics)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Kidney Disease. [niddk.nih.gov/health-information/kidney-disease](https://www.niddk.nih.gov/health-information/kidney-disease)

For more information, contact the
National Kidney Foundation

Toll-free help line: **855.NKF.CARES**
or email: nkfcare@kidney.org