

Kidney Disease and High Blood Pressure

How Your Kidneys Work

Your body has two kidneys that filter waste products and excess water from your system, allowing the rest of your vital organs to function properly and keep you healthy.

Your kidneys help regulate blood pressure, salt and potassium levels. They also produce hormones that control red blood cell production and vitamin D levels to help you absorb calcium to give you strong bones and muscles.

When your kidneys are not able to work as they should, these important body functions are affected. This may lead to chronic kidney disease. When this occurs, your doctor may recommend regular dialysis treatment to help manage your condition and health.

Symptoms of Kidney Disease

- Fatigue
- Difficulty concentrating
- Difficulty sleeping
- Poor appetite
- Muscle cramping at night
- Swollen feet and ankles
- Puffiness around the eyes
- Dry, itchy or scaly skin
- Frequent urination (mostly at night)

According to the National Kidney Foundation, kidney disease affects 26 million Americans. A variety of conditions may cause kidney disease, one of which is high blood pressure.



High Blood Pressure and Your Kidneys

Your heart sends needed blood through your body's arteries and veins, supplying important nutrients to organs and tissues. Blood pressure is the measurement used to determine the health of your arteries. A reading of 120/80 is considered normal, while 140/90 is considered high.

High blood pressure, also called hypertension, occurs when the pressure of blood against the walls of your arteries increases. Over time, high blood pressure can cause arteries to narrow, weaken or harden, making it difficult for blood to reach your kidneys.

High blood pressure makes it harder for your kidneys to work. Increased pressure on the kidneys can affect their ability to properly filter waste from your body and perform other important functions.

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Risk Factors for Hypertension

- 45 years or older
- Overweight
- Being of African American descent
- Family history of high blood pressure
- Eating a diet high in salt
- Drinking alcohol regularly
- Smoking



While high blood pressure has no symptoms, it is one of the main causes of kidney disease and the second leading cause of kidney failure. The National Kidney Foundation estimates that 33 percent of American adults—approximately 73 million people— have high blood pressure, and about 20 percent of adults with hypertension have chronic kidney disease.

Tips to Prevent Heart Disease and Kidney Disease

Although some risk factors for these conditions are out of your control, many can be managed with a proper diet and a healthy lifestyle. Adopting these changes can be the key to good kidney care and better health.

- **Schedule regular physician visits.**

Make sure to see your family physician regularly to track your blood pressure, heart rate and overall health. A regular physical will include basic blood work and a urine test to make sure your vital organs are working well. These tests also determine if there are indications that the kidneys are not working properly. Your physician will also test for other conditions for which you may be at risk.

- **Maintain a heart-healthy diet.**

Eating healthy provides the proper nutrients and vitamins that your body needs to function normally. This means eating fresh fruits and vegetables, grains, and low-fat dairy foods, and reducing the amount of salt in your diet, which has been proven to increase blood pressure and adversely affect kidney function. A low-fat diet can keep cholesterol levels at a normal range.

- **Drink plenty of water.**

Not drinking enough water can cause kidney damage. Drinking water leads to frequent urination, which enables your kidneys to function normally and properly remove waste from your body.

- **Keep blood sugar under control.**

High levels of sugar in the blood can cause damage to organs, including the kidneys, notably small blood vessels and arteries that are housed within them. If you have diabetes, you should pay careful attention to sugar levels, especially if you already have kidney problems.

- **Control blood pressure.**

Keeping your blood pressure below 130/80 is a healthy range to maintain. When blood pressure becomes high, it can damage delicate blood vessels and arteries in the kidneys.

- **Quit smoking.**

Kicking the smoking habit can lower your risk for many health conditions and issues, one of which is kidney damage.

- **Monitor use of over-the-counter medications.**

All over-the-counter medication use should be approved by your family physician. Acetaminophen, aspirin and ibuprofen can cause kidney damage, especially if recommended dosages are exceeded. Also, talk with your physician before adding any new medications.

- **Exercise.**

At least 30 minutes of moderate exercise several times a week keeps your heart pumping and your muscles active. Walking, cycling, jogging, or swimming are excellent options to support your good health.

- **Limit alcohol.**

Heavy drinking can damage your kidneys by increasing urine flow and causing the kidneys to conserve fluids. This keeps your kidneys from functioning normally and can lead to kidney disease.

For more information about our program or for a physician referral to one of our kidney care experts, call 443-444-4100.

Why Choose Us?

MedStar Good Samaritan Hospital, the largest, not-for-profit dialysis provider in the state of Maryland, has been designated a 5 Diamond Facility by the Mid-Atlantic Renal Coalition based on our commitment to providing safe, high-quality care and promoting kidney health education and awareness.

MedStarGoodSam.org/KidneyCare

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